

The
Canadian
Rose
Annual



1960



MRS ANNE GRABER
10 FAIRFAX CRES
SCARBOROUGH ONT

M1L 1Z8

The Canadian Rose Annual *1960*

ORVILLE E. BOWLES

EDITOR



Published by

THE CANADIAN ROSE SOCIETY

Toronto, Ontario

Index

PREFACE by Orville E. Bowles	Page 4
THE ROSE, Author Unknown	5
PATRONS, PATRONESSES, OFFICERS, DIRECTORS, COMMITTEES	6
THE PRESIDENT'S GREETING	11
THE ANNUAL MEETING	13
FINANCIAL STATEMENT	17
TROPHIES AND PRIZES AWARDED AT THE 1959 ROSE SHOW	18
THE LORD GOD PLANTED A GARDEN, <i>by</i> Dorothy Frances Gurney	23
THE NATIONAL ROSE SHOW-1959, <i>by</i> Nina E. L. Marshall .	24
THE VANCOUVER ROSE SHOW, <i>by</i> Mollie McLeod	27
A DAY AT THE BRITISH NATIONAL ROSE SHOW, <i>by</i> Jim Burston	29
THE TECHNIQUE OF ROSE PHOTOGRAPHY, <i>by</i> Jerry Field .	34
RECENT TRENDS AMONG FLORIBUNDA ROSES, <i>by</i> Leonard Hollis	39
MAKING AND MAINTAINING YOUR GARDEN CARPET, <i>by</i> T. J. Heeg	43
ROSES AND SOIL FERTILITY, <i>by</i> R. W. Oliver	58
FLOWER ARRANGEMENT, <i>by</i> Ena Harkness	65
HYBRIDIZING LIMITATIONS, <i>by</i> Roy E. Shepherd	69
THE AMERICAN ROSE FOUNDATION, <i>by</i> Dr. Cynthia Westcott	71
THE WILD ROSE-THE FLORAL EMBLEM OF ALBERTA, <i>by</i> P. D. McCalla	78
THESE DELIGHTFUL MINIATURES, <i>by</i> Clifford T. Wilson .	80
ROSE-GROWING IN THE ATLANTIC PROVINCES, <i>by</i> G. C. Warren	87
LET IT SNOW, <i>by</i> Milton Cadsby	91
THE ROMANCE OF THE FLORIBUNDAS, <i>by</i> J. H. Wilding .	96
LET US CONSIDER THE EARTHWORM, <i>by</i> Orville E. Bowles .	101

MUSINGS IN GLENGARIEFF, <i>by</i> Mrs. J. J. Gallagher	Page 107
THEIR MEMORY LIVETH ON	116
DISTRICT REPORTS:	
Westholme, <i>by</i> F. N. Parker	117
Victoria, <i>by</i> George Hepworth	118
Vancouver, <i>by</i> Archie Selwood	119
Edmonton, <i>by</i> Edward Walker	121
Calgary, <i>by</i> Mrs. W. H. Dowling	122
North-Central, Saskatchewan, <i>by</i> Gary Essar	123
Manitoba, <i>by</i> Mrs. W. A. MacDonald	125
North-western Ontario, <i>by</i> H. C. Westbrook	127
Windsor, <i>by</i> Emerson Mitchell	129
Hamilton, <i>by</i> Lela M. Brooks	133
Kingston, <i>by</i> Miss A. Frances McLeod	134
Mount Royal, <i>by</i> E. B. Jubien	136
St. Paul L'Ermite-L'Assomption-Repentigny, <i>by</i> Mr. and Mrs. R. Ferguson	138
Quebec City, <i>by</i> Mrs. E. M. Little	140
Dalhousie, <i>by</i> L. A. Miller	142
Annapolis Royal, <i>by</i> Mrs. Marie Cox	143
Halifax, <i>by</i> David F. Oland	146
Sydney, <i>by</i> Wm. C. Buchanan	147
Prince Edward Island, <i>by</i> G. C. Warren	148
Newfoundland, <i>by</i> Harry Hamlyn	151
THE ROSE ANALYSIS	153
THE CLEARING HOUSE	166
THE CONSTITUTION AND BY-LAWS	196
INDEX TO ADVERTISERS	203

Preface

IN presenting this first issue of the new *Canadian Rose Annual* we acknowledge with grateful appreciation the contribution of the writers, reporters, and the many who assisted in its production – including our friends across the border, and over the sea.

This year Mr. W. J. Keenan has prepared 'The Clearing House' and Mr. Archie Selwood 'The Rose Analysis' and we are indeed pleased to have such a fine preparation of this important information.

Our advertisers have again been generous in their support, making an enlarged presentation possible. We solicit for them the continued patronage of our members and friends.

And to all who cherish and cultivate the rose may the pages of this work bring a renewed appreciation of this symbol of all that is good and beautiful in life.

ORVILLE E. BOWLES



'JUNE PARK' (H.T.)
'Peace' × 'Crimson Glory'
Raised by Bertram Park

Reproduced by kind permission of the National Rose Society of Great Britain

The Rose

IN spite of centuries of disturbances, upheavals and turmoils, the rose has persisted and improved to become an ever-living symbol, that come what may, Beauty shall not perish from the earth, and that of all the works of men, none is greater.

That in the trials and tribulations through which he has passed, he has still found time! Nay, made time, to produce the modern rose as a permanent memorial to all that is Good and Beautiful in Life. For while the rose lives – so will man's thoughts turn from horrors, fears, devices and stratagems to return to the beauty which abides in the mind and urges him to produce that which is better and more beautiful.

Author unknown

The Canadian Rose Society

Chief Patron:

HIS EXCELLENCY MAJOR-GENERAL GEORGE P. VANIER,
D.S.O., M.C., C.D.
Governor-General of Canada

Patrons:

Mrs. G. Graeme Adam
Commissioner George T. Bell and Mrs. Bell
Mr. Ralph P. Bell, O.B.E., and Mrs. Bell
The Honourable Charles Daly and Mrs. Daly
Mrs. George H. Duff
Lady Eaton
Mr. Dunington Grubb
Dr. R. J. Hilton, B.SC. (AGR.), PH.D.
Colonel R. S. McLaughlin
The Honourable H. de M. Molson, O.B.E.
Mr. Harold Rea and Mrs. Rea
Mrs. Campbell Reaves
Mr. A. C. Selwood
Dr. F. L. Skinner, M.B.E., L.L.D.
Miss F. Fyfe Smith
Mr. Schuyler C. Snively and Mrs. Snively
The Honourable Mr. Justice C. D. Stewart
Miss Mabel Stoakley
Mrs. P. A. Thomson

HONORARY OFFICERS

Honorary President:

Mr. W. J. Keenan

Honorary Vice-Presidents:

Mrs. A. C. McMaster

Dr. A. H. Rolph

Mr. E. W. Tyrill, Q.C.
Mrs. J. Lockbie Wilson

Honorary Directors:

Mr. A. E. Brown
Mr. J. F. Clark
Mrs. J. J. Gallagher

Mr. J. A. Lowe
Mr. Emerson Mitchell
Mrs. A. L. Naismith

Dr. R. W. Oliver
Mr. D. C. Patton
Professor J. C. Taylor
Mrs. C. T. Wilson

OFFICERS

President:

Mrs. J. H. Baillie

Vice-Presidents:

Mr. A. M. Anderson
Mr. E. Billington

Mr. O. E. Bowles
Mrs. H. P. Marshall

Board of Directors:

Mr. A. M. Anderson
Mrs. J. H. Baillie
Mr. E. Billington
Mr. O. E. Bowles
Mrs. R. M. Brophy
Mr. M. A. Cadsby
Mr. C. R. Davis

Mr. G. S. Flagler
Mr. E. E. Goulding
Mrs. S. Jupp
Mr. W. J. Keenan
Mrs. H. P. Marshall
Mr. S. McConnell
Mr. A. A. Norton

Mr. J. V. Stensson
Mr. C. R. Stephenson
Mrs. A. B. Meiklejohn
Mr. J. W. Whytock
Mrs. B. Willinsky
Mr. L. Earl Wicklum

Advisory Board:

Mr. S. B. Bartlett
Mr. C. W. Cruickshank
Mr. F. F. Dufton

Miss M. Dove
Mrs. M. C. Hooper
Mrs. H. P. Marshall

Mr. E. Mitchell
Mr. S. McConnell
Mr. A. C. Selwood
Mr. J. V. Stensson

Treasurer: Mr. F. E. Goulding, 38 Berkinshaw Cres., Don Mills, Ontario

Secretary: Mrs. R. Millar, 18 Bimbok Road, Scarborough, Ontario

Exhibition Secretary: Mrs. A. A. Norton, 22 Eastview Cres., Toronto, Ontario

Prize Committee:

Mr. J. W. Whytock (*Chairman*)

Mrs. J. H. Marshall

Mr. O. E. Bowles

Mr. S. J. Flagler

Publications Committee:

Mr. O. E. Bowles, 22 Cameron Crescent, Toronto 17, Ontario
(*Chairman and Editor of 'The Canadian Rose Annual'*)

Mr. M. A. Cadsby, 64 Bannockburn Avenue, Toronto 12, Ontario
(*Vice-Chairman and Editor of 'The Rose Bulletin'*)

Mrs. J. J. Callagher

Mrs. H. P. Marshall

Mr. A. A. Norton

Mr. W. J. Keenan

Mrs. H. S. McLeod

Mr. A. C. Selwood

Programme Committee:

Mrs. R. M. Brophy (*Chairman*)

Miss M. Dove

Mrs. M. C. Hooper

Mrs. H. P. Marshall

Advertising Committee:

Mr. A. A. Norton (*Chairman*)

Mr. A. M. Anderson

Mr. O. E. Bowles

Mr. L. Earl Wickham

Publicity Committee:

Mr. E. Billington (*Chairman*)

Mrs. B. Willinsky (*Vice-Chairman*)

Mr. S. J. Flagler

Mrs. H. P. Marshall

Mr. C. R. Stephenson

Public Relations:

Mrs. H. P. Marshall

Glendon Hall Project Committee:

Mr. A. A. Norton

Mr. A. M. Anderson (*Chairman*)

Mr. J. V. Stensson

Representatives to the Royal Winter Fair:

Mr. W. J. Keenan

Mrs. H. P. Marshall

Mr. C. R. Stephenson

Membership Committee:

Mr. W. J. Keenan (*Chairman*)

107 Cortleigh Boulevard, Toronto, Ontario

Vice-Chairmen:

Mr. E. Billington

Mrs. E. Bridgett

Mr. C. R. Davis

Mr. O. E. Bowles

Mr. C. R. Stephenson

Members:

Mrs. O. H. Antoft,
Nova Scotia

Mrs. J. H. Gable,
Ontario

Mrs. R. E. Murdock,
British Columbia

Mr. F. Blakeney,
British Columbia

Mrs. J. J. Gallagher,
Quebec

Mrs. G. M. Smith,
Ontario

Mr. W. G. Borland,
Quebec

Mr. T. Graham,
Ontario

Mr. C. R. Stephenson,
Ontario

Mr. W. C. Buchanan,
Nova Scotia

Mr. E. B. Jubien,
Quebec

Mr. G. C. Warren,
P.E. Island

Mr. G. Fenske,
Ontario

Mrs. W. MacDonald,
Manitoba

Mrs. C. T. Wilson,
Ontario

Exhibition Committee:

Mr. A. A. Norton (*Chairman*)

Mrs. A. Meiklejohn (*Vice-Chairman*)

Mr. A. M. Anderson

Miss M. Dove

Mrs. A. L. Naismith

Mr. S. B. Bartlett

Mr. F. F. Dufton

Mrs. A. A. Norton

Mr. E. Billington

Mr. G. S. Flagler

Mrs. G. M. Smith

Mrs. M. A. Cadsby

Mrs. M. C. Hooper

Mr. J. V. Stensson

Mrs. N. H. Carver

Mrs. S. Jupp

Mr. C. R. Stephenson

Mr. C. W. Cruickshank

Mr. J. A. Lowe

Mr. E. W. Tyrrell, Q.C.

Mrs. G. Culver

Mrs. H. P. Marshall

Mrs. B. Willinsky

Mr. C. R. Davis

Mrs. C. T. Wilson

Regional Directors Committee:
Mr. M. A. Cadsby (*Chairman*)

REGIONAL DIRECTORS:

Region 1

Mr. Archie Selwood,
1450 West 40th Avenue,
Vancouver 13, B.C.
Mr. F. N. Parker,
Westholme,
Vancouver Island, B.C.
Mrs. R. E. Murdoch,
2785 Crescent View Drive,
North Vancouver, B.C.

Mr. J. W. Lawton,
1179 Princess Avenue,
London, Ontario
Mr. Emerson Mitchell,
1557 Bruce Avenue,
Windsor, Ontario
Mr. Albert N. Butwick,
R.R.2,
Hamilton, Ontario
Mr. P. A. Lambertus,
Walkerton, Ontario

Region 2

Mr. E. Walker,
10808 140th Street,
Edmonton, Alberta

Region 5

Mr. W. George Borland,
418 New Birks Buildings,
Montreal, Quebec
Mr. E. B. Jubien,
150 Vivian Avenue,
Town of Mount Royal, P.Q.
Mr. Harold C. Cross,
702, Churchill Place,
Baie d'Urfee, P.Q.

Region 3

Mr. H. C. Westbrook,
48 Prospect Avenue,
Port Arthur, Ontario
Mrs. W. A. McDonald,
174 Baltimore Road,
Winnipeg 13, Manitoba
Mr. Eric Smith,
74 Main Street South
Portage la Prairie, Manitoba

Region 6

Dr. A. B. Crosby,
324 Spring Garden Road,
Halifax, Nova Scotia
Mr. L. A. Miller,
P.O. Box 408,
Dalhousie, N.B.
Mr. G. J. Landry,
49 Black Street,
Lakeburn, N.B.

Region 4

Mrs. Alan H. Heidman,
373 Park Street North
Peterborough, Ontario
Mr. Murray Bowes,
24 Mountain Street,
Merriton, Ontario
Mr. Keith F. Schwartz,
57 Lowell Street North,
Galt, Ontario
Dr. J. H. C. Gowland,
221 King Street East,
Kingston, Ontario

Region 7

Mr. G. C. Warren,
Dept. of Agriculture,
Experimental Farms Service,
Charlottetown, P.E.I.
Dr. T. E. Harris,
284A Water Street,
St. John's, Newfoundland

Auditors:

Mr. S. B. Bartlett, C.A.

Mr. M. C. Coutts, R.I.A.

LIFE MEMBERS

Adam, Mrs. G. Graeme
Bentley, Mr. O. C.
Board of Parks Management,
St. Catharines, Ontario
Brophy, Mrs. R. M.
Brownlee, Mr. R. J.
Buda, Mr. John
Campbell, Mrs. W. R.
Devlin, Mr. C. B.
Dew, Mr. Chas. T.
Dufton, Mr. F. F.
Lady Eaton
Gibbons, Mrs. J. J.
Gow, Lt.-Col. Walter
Gunn, Mr. Donald, Q.C.
Holden, Mrs. J. B.
Howard, Mrs. Lewis A.
Jarvis, Miss Bertha
Keenan, Mr. W. J.
Kennedy, Mrs. J. R.

Laidlaw, Miss Margaret C.
Laidlaw, Mr. R. A.
Laidlaw, Mr. Walter C.
McLaughlin, Col. R. S.
McMaster, Mrs. A. C.
McMichael, Mr. S. B.
Millar, Mr. James A., Q.C.
Norton, Mr. A. A.
Osler, Mrs. F. G.
Patton, Mr. D. C.
Reaves, Mrs. Campbell
Robertson, Miss Marion T.
Rolph, Dr. A. H.
Thomson, Mrs. P. A.
Tyrrell, Mr. E. W., Q.C.
Walker, Mr. Gerald N.
Webster, Mr. A. J.
Webster, Miss Hazel A.
Wicklum, Mr. L. Earl
Wright, Mrs. Hedley

AFFILIATED SOCIETIES

Baie d'Urfee Horticultural Society
Bedford Garden Club
Calgary Garden Club
Calgary Horticultural Society
Chapleau Horticultural Society
Don Mills Horticultural Society
Guelph Horticultural Society
Halifax County Horticultural
Association
Hamilton Horticultural Society
Horticultural Experiment Station
No. 67
Horticultural Society of the Town
of Mount Royal
Horticultural Society of Township
of Teck
Ingersoll and District Horticultural
Society

Leaside Horticultural Society
London Horticultural Society
Mimico Horticultural Society
Mount Hamilton Horticultural Society
Nelson Garden Club
Niagara Falls Horticultural Society
Northern Electric Club
North York Township Horticultural
Society
Owen Sound Horticultural Society
Peterboro Horticultural Society
Port Arthur Horticultural Society
Riverdale Horticultural Society
Sault Ste Marie Horticultural Society
Sious Look-out Horticultural Society
St. Clair Horticultural Society
St. Lambert Horticultural Society
Winnipeg Horticultural Society
Woodbridge Horticultural Society



MRS. J. H. BAILLIE

President

The President's Greeting

IN assuming the Presidency of your Society I do so with humility and a great appreciation of the honour bestowed on me; realizing the responsibility involved and the great opportunity of making a contribution to the many gardeners throughout the land who love and cultivate the rose.

Our predecessors have built exceedingly well and on this foundation our Society will progress. I am indeed pleased to be your President at a time when we all feel that the Society is on the threshold of the great progress that comes when each and every member assumes the effort of an emissary of the 'Queen of the Garden'. Cultivate and enjoy the friendship of fellow rosarians in your community; form discussion groups and visit each other's gardens – and induce them to join in our membership and participate in the pleasure of our effort.

Due to extreme weather conditions in many parts of our land last winter many rose gardens were seriously damaged, many others completely wiped out. It was a serious blow to our Society, but the speed with which these ruined gardens were replaced with larger and better plantings was very reassuring that come what may, the rose shall not perish from the earth.

Notwithstanding the disastrous winter in the Toronto area, and the extreme heat of June, we had another very satisfactory show at Hart House, although the scars were very evident. The quality and quantity of the bloom was down, but this was largely replaced by a great increase in the decorative section which attracted a lot of attention. We greatly appreciated the fine support of our British Columbia members in the air-borne class.

The members of our Standing Committees have continued to give generously of their time and talent, and the continuance of this interest and effort assures a live and progressive society.

We are deeply indebted to our Editor, and all those who assist him in the preparation of the new *Canadian Rose Annual*

being presented herewith. We hope it will be enjoyed by our members, and that the improved appearance and format is indicative of the urge of progress being felt throughout the Society.

To all our members and friends, at home and abroad, we wish for you a very successful season in your garden, and may you have all the pleasures that roses bring.

The Annual Meeting

Mrs. J. H. Baillie

THE annual meeting of The Canadian Rose Society was held at the Womens' Art Association Centre, 23 Prince Arthur Avenue, Toronto, Ontario, on Monday, 5 October 1959 at the hour of 8 p.m. The President, Mr. W. J. Keenan, occupied the chair and Mrs. R. Millar acted as Secretary of the meeting.

The President extended a welcome to the goodly number present, considering the very inclement weather, and then requested assurance from the Secretary that the meeting was properly constituted in accordance with the Society's by-laws. The Secretary then read Section 15 of the by-laws, assured the Chairman that the meeting was properly held, and announced the election of the following members as Directors for 1960.

Mr. A. M. Anderson	Mr. G. S. Flagler	Mr. A. A. Norton
Mrs. J. H. Baillie	Mr. E. Goulding	Mr. J. V. Stensson
Mr. E. Billington	Mrs. S. Jupp	Mr. C. R. Stephenson
Mr. O. E. Bowles	Mr. W. J. Keenan	Mr. J. W. Whytock
Mrs. R. M. Brophy	Mrs. H. P. Marshall	Mr. L. Earl Wicklum
Mr. M. A. Cadsby	Mr. S. McConnell	Mrs. B. Willinsky
Mr. C. Davis	Mrs. A. B. Meiklejohn	

Upon a motion made by Mr. A. M. Anderson, seconded by Mr. E. Billington, the minutes of the Annual Meeting held on 7 October 1958 were taken as read.

The Treasurer, Mr. G. E. Goulding, presented his report for the fiscal year, a copy of which appears herewith, and upon motion made by Mr. G. E. Goulding, seconded by Mr. C. R. Stephenson, was accepted as presented subject to audit.

Mr. A. M. Anderson then expressed the thanks of the Society to our auditors, Messrs. M. C. Coutts and S. B. Bartlett, for the work done by them and moved that they be reappointed for 1960. Seconded by Mr. A. A. Norton.

The President then requested Mr. O. E. Bowles to read the proposed changes in the by-laws, of which every member had been advised in writing, and after a full review by the Chairman for the need of increased membership fees, and a change in the by-laws governing the duties and election of Regional Directors, it was moved by Mr. O. E. Bowles and seconded by Mrs. H. P. Marshall that the by-laws be changed accordingly. Carried with two members opposing.

Mr. W. J. Keenan then addressed the meeting as follows:

On this the fifth Annual Meeting of The Canadian Rose Society I extend to all members present, and their guests, my sincere felicitations. It is my hope that all of us who are interested in 'The Queen of Flowers' will do everything within our power to further the interests of the Society; both in its growth and its dedication to the cultivation of the rose throughout Canada.

Our Society suffered severely from the extreme winter experienced in many parts of the country; many members were completely wiped out and many others had serious damage. It is encouraging therefore in reviewing the membership lists to find that our membership has held fast. Those who retired were replaced by new members. We will need the concentrated effort of every member to maintain and increase our membership.

For the past two years we have been fortunate to have as head of our Programme Committee, Miss Margaret Dove. She has done an outstanding job, our meetings showing improvement under her guidance. We regret that she will not be with us for the next few years as she has been elected President of The Garden Club of Toronto, an important post that will keep her very busy. We wish her every success in this undertaking.

The Rose Show held at Hart House on 22 June, under the direction of Mr. A. A. Norton, was a decided success. We broke new ground and the success of future shows seems to be assured. Our congratulations and thanks to the Exhibition Committee for a job well done. A complete report on the show will appear in the *Annual*.

Due to the excellence of our *Year Book* we have gained

recognition in many lands. Our new Editor, Mr. Orville E. Bowles, gave us an outstanding book in 1959 and the Society is indebted to him.

The Vice-Presidents were all a tower of strength. They put a real effort into the various tasks assigned to them and worked hard to attain our goal – a bigger and better Society. They have been of real assistance in solving the many problems that have arisen from time to time. The Committee Chairmen have all worked hard to provide the members with a Society we can all be proud of, and I am pleased to have been associated with them.

There are eleven Directors' meetings held throughout the year. The attendance this year was excellent – the best on record and such interest is reassuring that the operation of your Society is in good hands.

At this point I am going to digress for a moment to touch on the local scene. During the past few years the City of Toronto Parks Department, under the guidance of Commissioner George T. Bell, have done an excellent job in the beautification of our parks. Have you visited High Park recently? The excellent work done here is worthy of a visit. There are many other fine rose gardens in Exhibition Park, Glendon Hall, and Edwards Gardens, to mention but a few. Visit them as often as you can and you will find that the rose beds are usually the centre of attraction. Glendon Hall, on Bayview Avenue, is our own project in conjunction with the University of Toronto. Visit it and support it to the best of your ability by contributing to the Glendon Hall fund.

At the Annual Meeting a year ago our speaker, Mr. Carl A. Johnson of Buffalo, stressed very strongly the need of forming local rose societies. It is an excellent idea and should have the active support of each of our members. Every city, town and village in those sections of Canada where roses can be grown should have a local rose society. A small society of ten people that are active in the culture, promotion and study of roses accomplishes more than societies of 100 members or more who just sit back and do nothing. The harder you work at any hobby the more you will enjoy it. Some of the larger cities should have more than one society – all associated with and forming a part of The Canadian

Rose Society. When such organizing has been accomplished your Society will be able to more actively serve all those who love the rose and subscribe to our objective – the study of roses and the promotion and cultivation thereof.

The Society is always saddened by the loss of active members although their memory liveth on. It is with sorrow and regret that I have to report the passing of one of our patrons, and a great friend of this Society, in the person of Lt.-Col. W. G. MacKendrick, D.S.O. He was an ardent lover of the rose, and at one time his Toronto Island home was surrounded by one of the finest rose gardens in Ontario.

My term of President now comes to an end – two years of enjoyment. If in any small way I have helped the Society, happiness abides with me, and to all I wish many happy days of growing the ‘Queen of Flowers – the Rose’.

The speaker of the evening, our own Mr. A. A. Norton, was then introduced by Miss Margaret Dove. Mr. Norton gave a very interesting and informative talk on winter protection particularly through the use of fibre-glass which he has been using for many years with outstanding success. After a question period when Mr. Norton was able to clear up many problems for the members Mr. W. J. Keenan extended the thanks of the Society for his very fine talk.

At this point in the meeting it was announced that Mrs. A. B. Meiklejohn had been awarded the S. B. Bartlett Challenge Trophy for highest aggregate score in the Fall Show. The other prizewinners were presented with bags of rose compost by High Park Rose Specialists, which were greatly appreciated.

The President then thanked the Judges, Mrs. C. T. Wilson and Mrs. A. Brooks, for their contribution in judging the Fall Show and after adjourning the meeting, invited all present to see the Show and enjoy the refreshments arranged by Mrs. R. M. Brophy.

FINANCIAL STATEMENT

Covering Receipts and Disbursements, period from 1 October 1958 to 30 September 1959

RECEIPTS		\$	\$
Bank Balance as at 30 September 1958	.	.	722.57
Memberships	.	2,219.00	
Sale of <i>Year Book</i>	.	80.78	
Rose Exhibition—(Incl. receipts previous year)	(1)	891.95	
Advertising	(2)	1,055.00	
Donations	(3)	369.50	
			<u>4,616.23</u>
			5,338.80
DISBURSEMENTS			
Postage	(1)	320.00	
Printing and Stationery	(2)	828.42	
Honorarium	(3)	509.12	
<i>Year Book</i>	(4)	1,924.87	
Meetings, Rentals, General	(5)	192.56	
Rose Show Expenses	(6)	1,062.61	
Insurance	(7)	43.63	
Bank Services Charges	(8)	22.59	
Benevolence	(9)	30.30	
Prize List	(10)	20.00	
Addressograph	(11)	272.85	
Memberships in other Societies	(12)	9.02	
Publicity	(13)	20.00	
			<u>5,255.97</u>
Bank Balance as at 30 September 1959	.	.	82.83

ROSE EXHIBITION—1959

RECEIPTS			
Entry Fees	.	47.00	
Auction Sale	.	218.45	
Cash Admissions	.	366.00	
Ticket Returns	.	260.50	
			<u>891.95</u>
DISBURSEMENTS			
Hart House Rental and Services	.	419.30	
Prize List	.	23.22	
Trophy, Medals, Credits, Construction, Printing, etc.	.	620.09	
			<u>1,062.61</u>
Excess of Disbursements over Receipts	.	.	170.66
GLENDON HALL FUND			
Bank Balance 30 September 1958	.	223.63	
Receipts	.	91.00	
			<u>314.63</u>
Disbursements	.	.	118.34
			<u>196.29</u>
Outstanding Cheques	.	.	49.15
			<u>245.44</u>
Bank Balance as at 30 September 1959	.	.	245.44

S. B. BARTLETT, C.A.
M. C. COUTTS, R.I.A.
Auditors.

Trophies and Prizes Awarded at the Canadian National Rose Show

Hart House, Toronto, 22 June 1959

SECTION A—CANADIAN NATIONAL ROSE CLASSES

Class

- A W. J. Keenan Regional Challenge Bowl—Four specimen H.T. blooms, one each of four different varieties; 1 Mrs. M. Willinsky, 2 E. Billington.
- C Paul B. Sanders Memorial Challenge Trophy—Exhibit of new roses introduced within the last five years: 1 A. A. Norton, 2 W. J. Keenan.
- D P. L. Whytock Challenge Trophy—Exhibit of floribunda or polyantha roses, three varieties: 1 A. A. Norton, 2 W. J. Keenan, 3 G. Baker.
 - 1. Dunlop & Sons Ltd. Challenge Trophy; The C.R.S. Silver Medal; The C.R.S. Bronze Medal—Display of roses on table covering approximately 30 sq. ft.: Toronto City Parks.
 - 2. S. McGredy & Son Challenge Cup—Exhibit of roses, six different varieties, blooms or sprays: 1 A. M. Anderson, 2 Mrs. B. B. Anderson, 3 W. J. Keenan.
 - 3. Ella Baines Memorial Challenge Trophy—Three hybrid perpetuals, one or more varieties, shown in a vase: 1 G. Baker.
 - 4. The T. Eaton Co. Ltd. Challenge Trophy—Specimen bloom, hybrid perpetual shown in a vase: 1 no award, 2 Mrs. J. H. Baillie, 3 Mrs. S. Jupp.

SECTION B—HYBRID TEAS

- 7. Ellis Bros. Ltd. Challenge Trophy—Three varieties hybrid tea roses, one bloom each: Mrs. A. L. Naismith.
- 8. Sir William Meredith Trophy represented by the Heirs of the late Mrs. Allen Baines—Three pink varieties of hybrid tea roses, one bloom each: 1 E. Billington, 2 A. A. Norton.
- 9. Miss Vera McCann Challenge Trophy—Three red varieties of hybrid tea roses, one bloom each: 1 Mrs. S. Jupp, 2 Mrs. M. Willinsky.
- 10. The John H. Dunlop Memorial Challenge Trophy—Three blend or bi-colour varieties of hybrid tea roses, one bloom each: 1 F. E. Goulding, 2 Mrs. M. Willinsky, 3 Mrs. A. L. Naismith.
- 11. 1 exhibition bloom, 'Peace': 1 Dr. H. I. Kinsey, 2 F. E. Goulding, 3 H. Stoneman.
- 12. 1 exhibition bloom, Chrysler Imperial: 1 no award, 2 Mrs. A. McAllister, 3 G. Culver.

SECTION B—*continued*

Class

13. 1 exhibition bloom, 'Grande Duchess Charlotte': 1 G. Cassels.
15. 1 exhibition bloom, 'Crimson Glory': 1 E. Billington, 2 A. M. Anderson, 3 A. A. Norton.
16. 1 exhibition bloom, 'Diamond Jubilee': 1 no award, 2 G. Culver.
17. 1 exhibition bloom, 'Michèle Meilland': 1 G. Cassels, 2 G. Culver, 3 A. A. Norton.
18. 1 exhibition bloom, 'Helen Traubel': 1 H. Stoneman, 2 Mrs. S. Jupp, 3 G. Cassels.
19. 1 exhibition bloom, 'Confidence': 1 E. Billington.
20. 1 exhibition bloom, 'Tiffany': 1 J. A. Lowe, 2 M. Bowes, 3 C. Davis.
21. 1 exhibition bloom, 'White Knight': 1 E. N. Grant, 2 W. J. Keenan, 3 E. Billington.
22. 1 exhibition bloom, 'Ena Harkness': 1 E. Billington, 2 A. M. Anderson, 3 Mrs. A. L. Naismith.
23. 1 exhibition hybrid tea bloom, white or near-white: 1 Mrs. A. Stollery, 2 A. Stollery, 3 E. Billington.
24. 1 exhibition hybrid tea bloom, yellow: 1 Mrs. C. T. Wilson, 2 W. J. Keenan, 3 A. M. Anderson.
25. 1 exhibition hybrid tea bloom, yellow blend: 1 E. Billington, 2 M. Bowes, 3 J. A. Lowe.
26. 1 exhibition hybrid tea bloom, apricot and orange blend: 1 M. A. Cadsby, 2 W. J. Keenan, 3 M. Bowes.
27. 1 exhibition hybrid tea bloom, pink: 1 E. Billington, 2 Dr. H. I. Kinsey, 3 A. Stollery.
28. 1 exhibition hybrid tea bloom, pink blend: 1 A. Stollery, 2 A. M. Anderson, 3 Mrs. B. B. Anderson.
29. 1 exhibition hybrid tea bloom, medium red: 1 A. M. Anderson, 2 W. J. Keenan, 3 F. E. Goulding.
30. 1 exhibition hybrid tea bloom, dark red: 1 A. A. Norton, 2 A. M. Anderson, 3 J. A. Lowe.
31. 1 exhibition hybrid tea bloom, red blend: 1 A. Stollery, 2 C. Davis, 3 M. Bowes.

SECTION C—FLORIBUNDA AND POLYANTHAS

33. 1 spray of 'Frensham': 1 A. A. Norton, 2 M. Bowes, 3 A. M. Anderson.
34. 1 spray of 'Else Poulsen': 1 E. Billington.
35. 1 spray of 'Fashion': 1 Mrs. C. T. Wilson, 2 no award, 3 E. Billington.
36. 1 spray of 'Vogue': 1 M. Bowes.
37. 1 spray of 'Independence': 1 G. Cassels, 2 A. A. Norton.
- 37A. 1 spray of 'Spartan': 1 A. M. Anderson.
38. 1 spray of red: 1 A. A. Norton, 2 M. Bowes.
39. 1 spray of pink: 1 Mrs. M. C. Hooper, 2 M. Bowes, 3 A. M. Anderson.
40. 1 spray of yellow: 1 A. A. Norton, 2 M. Bowes, 3 W. J. Keenan.
41. 1 spray of a blend: 1 M. Bowes, 2 F. E. Goulding, 3 Mrs. C. T. Wilson.
42. 1 stem with solitary bloom: 1 G. Culver, 2 A. M. Anderson, 3 M. Bowes.

GRANDIFLORAS

Class

43. 1 spray of 'Queen Elizabeth': 1 G. Baker, 2 G. Cassels.
44. 1 spray of 'Montezuma': 1 Mrs. M. Willinsky.
45. 1 spray of 'Carrousel': 1 M. Bowes.
46. 1 stem of grandiflora rose with solitary bloom: 1 Mrs. A. B. Meiklejohn, 2 Mrs. N. Childs, 3 F. E. Goulding.
Bronze Medal presented by The National Rose Society of Great Britain for highest aggregate score of points in Classes 32 to 46: E. Billington.

CLIMBING ROSES

49. Three laterals of red climbing roses: 1 Mrs. J. H. Baillie, 2 G. Culver, 3 G. Baker.
50. Three laterals of pink climbing roses: 1 A. M. Anderson, 2 G. Baker, 3 Mrs. S. Jupp.
51. Three laterals of yellow climbing roses: 1 G. Culver.

NOVICE CLASS

53. Prize presented by Mr. A. A. Norton—Six hybrid teas, any variety: 1 Mrs. G. M. Smith, 2 J. M. Brown, 3 P. B. MacEwen.
54. Three hybrid teas, any variety: 1 Mrs. G. M. Smith, 2 Miss T. Burnie, 3 P. B. MacEwen.
55. Specimen bloom, hybrid tea: 1 P. B. MacEwen, 2 Mrs. G. M. Smith, 3 J. M. Brown.
56. Six stems or sprays of climbing roses: 1 Miss T. Burnie, 2 K. Swartz.
57. Six stems of floribunda or polyantha roses: 1 Mrs. G. M. Smith, 2 J. M. Brown.

MISCELLANEOUS

58. Single hybrid teas, 1 bloom: 1 A. A. Norton, 2 Mrs. J. H. Baillie, 3 Mrs. A. B. Meiklejohn.
59. Hybrid tea, 1 bud less than one-third open: 1 Mrs. C. T. Wilson, 2 Miss T. Burnie, 3 W. J. Keenan.
60. Hybrid tea, 1 bud, 1 bloom half open, 1 bloom full-blown: 1 A. A. Norton, 2 Mrs. M. Willinsky, 3 Mrs. A. McAllister.
61. Three blooms or sprays of miniature roses: 1 C. T. Wilson, 2 Mrs. C. T. Wilson, 3 Mrs. J. Lowe.

NON-MEMBERS

64. 1 hybrid tea, yellow: 1 G. Bartlett.

SECTION D—DECORATIVE CLASSES—THEME: LIVING WITH ROSES

1. Arrangement, 'Man Cannot Live by Bread Alone': 1. J. A. Lowe, 2 C. T. Wilson, 3 A. A. Norton.
2. Arrangement, 'A Penny Saved is a Penny Earned': 1 C. T. Wilson, 2 Mrs. A. B. Meiklejohn, 3 Mrs. J. H. Baillie.
3. Arrangement, 'Reflections': 1 Mrs. M. A. Cadsby, 2 C. T. Wilson, 3 Mrs. G. Brooks.
4. Arrangement, 'Time for Fun': 1 Mrs. A. G. Brooks, 2 Mrs. A. Wallace.

Class

5. Prize presented by Mrs. M. C. Hooper—Arrangement, 'New Moon': 1 Mrs. J. A. Lowe, 2 Mrs. A. B. Meiklejohn, 3 A. A. Norton.
6. Prize presented by Mrs. H. P. Marshall—Arrangement, 'We Go Modern': 1 Mrs. J. Lowe, 2 Mrs. M. A. Cadsby, 3 Mrs. A. G. Brooks.
7. Arrangement, 'Textural Contrasts': 1 Mrs. J. H. Baillie, 2 Mrs. A. B. Meiklejohn, 3 Mrs. A. G. Brooks.
8. A Hogarth curve, 'Harmonies': 1 Mrs. A. G. Brooks.
9. Tea-table Arrangement, 'Over the Tea Cups': 1 Mrs. A. B. Meiklejohn, 2 Mrs. M. A. Cadsby, 3 Mrs. C. T. Wilson.
10. One-rose Arrangement, 'Simplicity': 1 Miss M. Dove, 2 Mrs. A. G. Brooks, 3 Mrs. J. Lowe.
11. Massed Line Arrangement, 'Abundance': 1 Mrs. J. H. Baillie, 2 Mrs. A. B. Meiklejohn, 3 Mrs. J. Lowe.
12. An arrangement, 'The Dinner Hour': 1 Mrs. A. Wallace, 2 Mrs. A. G. Brooks.
13. Novice Class Arrangement, 'From a June Garden': 1 C. T. Wilson, 2 no award, 3 Mrs. J. C. Gray.
14. By invitation only Arrangement for Dinner Table, 'Anniversary': 1 Miss M. Dove, 2 Mrs. M. Willinsky, 3 Mrs. A. G. Brooks.

SECTION E—OPEN CLASSES

16. An Arrangement, 'Slightly Victorian': 1 no award, 2 Mrs. D. Goble.

SECTION F—MISCELLANEOUS

17. Gentleman's *Boutonnière*: 1 Mrs. A. G. Brooks, 2 E. Billington, 3 S. B. Bartlett.
18. Prize given by the Estate of Mr. Will Tillotson, 'Old Rose Bouquet': 1 Mrs. J. Lowe, 2 A. J. Webster, 3 Mrs. J. C. Gray.

SECTION G—TROPHY CLASS

1. Mrs. P. A. Thomson Challenge Trophy—Vase of roses, decorative arrangement, open to women members: 1 Mrs. A. B. Meiklejohn.
2. Lady Kemp Memorial Challenge Trophy—Arrangement of roses not fewer than six varieties, any kind but ramblers: 1 Mrs. A. G. Brooks.
3. Royal York Challenge Trophy—Line mass arrangement of red roses in pedestal type container: 1 Mrs. A. G. Brooks, 2 Mrs. J. H. Baillie.
6. Rose Bowl donated by Mrs. Schuyler Snively—Arrangement of climbing or rambler roses: 1 Mrs. J. H. Baillie, 2 Mrs. A. G. Brooks.
7. Mr. Seeley B. Brush Memorial Challenge Trophy—An arrangement of roses, with or without other flowers: 1 Mrs. A. B. Meiklejohn, 2 Mrs. M. A. Gadsby, 3 Mrs. A. Wallace.
10. Brig. A. E. Nash, M.C. Challenge Trophy—Small basket of roses only. 1 Mrs. M. A. Cadsby, 2 Mrs. A. Wallace.
11. Lieut.-Col. Hugh A. Rose Challenge Trophy—Basket of red roses: 1 Mrs. J. H. Baillie.
12. Mrs. J. Lockie Wilson Challenge Trophy—Bowl or vase of single hybrid tea roses: 1 no award, 2 Mrs. J. H. Baillie, 3 Mrs. A. L. Naismith.

SECTION H—FRAGRANT ROSES

Class

13. Rose Bowl donated by Mrs. Campbell Reaves—Six red roses not fewer than three varieties: 1 A. A. Norton, 2 Mrs. M. Willinsky, 3 A. M. Anderson.
14. A. Alan Gow Memorial Challenge Trophy—Three roses any variety or varieties: 1 no award, 2 A. M. Anderson.
15. C. Allen Snowdon Memorial Challenge Trophy—One rose: 1 W. J. Keenan, 2 A. M. Anderson, 3 V. Wales.

SECTION I—AIRBORNE EXHIBITS

A. J. Webster Challenge Trophy—Awarded for maximum points in the following three classes: Awarded jointly, due to a tie, to A. Selwood and Mrs. G. E. Walkinshaw.

16. Six hybrid teas, any variety or varieties: 1 A. Selwood, 2 E. N. Grant, 3 Mrs. G. E. Walkinshaw.
17. Three hybrid teas, any variety or varieties: 1 Mrs. R. E. Murdock, 2 A. Selwood, 3 Mrs. G. E. Walkinshaw.
18. One hybrid tea, any variety: 1 Mrs. G. E. Walkinshaw, 2 Y. R. Rhodes, 3 Mrs. R. E. Murdock.

SECTION J—SPECIAL TROPHIES

Best Rose in the Show, 'Madame Yves Latieulle', P. H. Mitchell Challenge Trophy: S. B. Bartlett.

Best White or Cream Rose in the Show 'Burnaby', Canadian Oil Companies Ltd. (prize) Silver Tray: E. N. Grant.

Highest Aggregate Score, Sir Harry Oakes Challenge Trophy: A. A. Norton.

Highest Aggregate Score in the Novice Section, Col. W. G. MacKendrick D.S.O. Challenge Trophy: Mrs. George M. Smith.

Special Sweepstakes Award in the Specimen section, also 4 to 31 Radio Broadcasting Station CFRB Special Prize: E. Billington.

Special Sweepstakes Award in the Novice Section, Classes 53, 54, 55, 56, 57 Radio Broadcasting Station CFRB Special Prize: Mrs. George M. Smith.

The Lord God Planted a Garden

*The Lord God planted a garden
In the first white days of the world.
And he set there an angel warden
In a garment of light enfurled.*

*So near to the peace of Heaven
That the hawk might nest with the wren,
For there in the cool of the even'
God walked with the first of men.*

*The kiss of the sun for pardon,
The song of the birds for mirth—
One is nearer God's heart in a garden
Than anywhere else on earth.*

DOROTHY FRANCES GURNEY

The National Rose Show 1959

Nina E. L. Marshall

ONCE again the hallowed halls of Hart House, University of Toronto, so familiar to many of the members of our Society, was the scene of the annual National Show on the afternoon and evening of 22 June 1959. It was a beautiful day, bright and comfortable, and blessed the weeks of planning and hard work of the Exhibition Committee. The large attendance at our National Show is always indicative of the interest and love of roses by the many gardeners and the general public of the area. Weather always has a great bearing on the attendance at such shows and in this regard, we have been very fortunate for the past few years.

Mr. Arthur J. Webster, who was introduced by our President, Mr. W. J. Keenan, officially opened the show. Mr. Webster, who has served three terms as President, and who is known as the dean of Canadian rosarians in this part of the continent, needs no introduction, except to the very newest members. He has been an active exhibitor and executive of the Society since joining in 1924, and his remarks and reference to many of the previous shows was very interesting.

There is a great variation in the time that gardens in the Toronto district reach their peak, and this year, due to the extremely hot weather in June, the show was a little late for many gardens. However, the fact that we had more exhibitors and more exhibits than for some time would indicate that the date was perfect for many of the others.

The severity of the winter and the extensive damage done was very evident in the quality of the bloom. The decorative section featured many new classes, and the innovation of the niches added to the overall enjoyment of the show and was the subject of much favourable comment.

Our members in British Columbia are to be congratulated for their fine showing in the air-borne class. This class was well supported in number of entries, and the awards won was ample evidence of the very high quality. The Silver Tray, awarded annually for the best white or cream rose in the show, by Canadian Oil Companies Limited, was won by Mr. E. N. Grant of Vancouver with a beautiful specimen of 'Burnaby'. It was very fitting that this lovely Canadian rose, born in British Columbia, should take this coveted trophy home to Western Canada for the first time. Competition amongst the Western entries was so keen that the judges had to award the A. J. Webster Challenge Trophy jointly to Mrs. G. E. Walkinshaw and Mr. A. Selwood.

The list of exhibitors contained many new names this year, and one of them, Mrs. George M. Smith from the western suburb of Port Credit, who has been growing roses seriously for only two or three years, staged some lovely blooms that won for her the Col. W. G. MacKendrick, D.S.O. Challenge Trophy for the highest aggregate score in the novice class.

The garden of the show Chairman and Past-President, Mr. A. A. Norton, was a tower of support to the show and won for him many awards, including The Sir Harry Oakes Challenge Trophy, for highest aggregate score.

Another competitor who needs no introduction, Mr. S. B. Bartlett, a former Director and Executive of the Society, staged a fine specimen of the beautiful yellow 'Madame Yves Latieulle', which, although given keen competition, was awarded the P. H. Mitchell Challenge Trophy for the best rose in the show.

Worthy of special mention also, was the fine showing of roses by the Parks Department of the City of Toronto, and the Challenge Trophy of Dunlop & Sons Limited was again won by this display. The show was well supported and greatly enhanced by many of Toronto's foremost florists and among the supporting non-competitive displays of our nursery friends were noticed the beautifully staged entries from The Dale Estate Limited, Sheridan Nurseries Limited, H. J. Mills, Concord Nurseries, and High Park Rose Specialists. The exhibit of exotic and unusual plants by Arthur J. Frost Limited was the scene of much interest. These

displays added a great deal to the show, as they do each year, and the Society is indeed grateful and appreciative of this support.

The success of this impressive show was due in no small part to the hard work of the show Chairman, Mr. A. A. Norton, and his Vice-Chairman, Miss M. Dove, who together with their untiring committee, are to be congratulated on such a fine production. Our thanks are extended to the Judges for their effort in judging the many entries; there was much keen competition that required the utmost in experience and knowledge.

To Miss Hazel Webster goes our thanks for refreshments served to the Judges, members of the Exhibition Committee and other Executive, at the tea hour; also, to Mr. C. R. Stephenson, who did a noble job as auctioneer at the close of the show when the great mass of bloom was auctioned.

Adding greatly to the smooth functioning of our annual shows is the effort and co-operation of the management and staff of Hart House, who can always be counted on to give their finest support.

So another Annual Rose Show becomes a part of the history of our Society, and we now turn our thoughts to the future and our plans for the 1960 show. We hope to make it, not necessarily 'bigger and better' than ever, but more interesting and more educational in every way.

The Vancouver Rose Show

(Mrs.) Mollie McLeod

THE weather, the roses, and the interest of the rose-loving people of the area, coupled with the effort of our capable chairwoman, Mrs. G. C. Faulkner, and her committee, spelled success for the Tenth Annual Show of the Vancouver Rose Society, held on 17 and 18 June at Kerrisdale Community Centre.

Since space does not permit the listing of all the many prizes won, we will have to limit the listing to the winners of the senior trophies. It was definitely Mrs. John McLachlan's day as her beautiful specimen of 'Peace' was awarded 'The Best Rose in the Show', and her 'McGredy's Yellow' 'The best Yellow in the Show'. In addition her 'Michèle Meilland' won 'The Best Bowl of Roses' and her specimen blooms 'The Best Box of Twelve Specimen Blooms' – really an outstanding performance for any garden. Mr. Art McGregor won the 'Best Red Rose in the Show' with 'Charles Mallerin' and the 'Best Box of Six Specimen Blooms' together with the 'Best Vase of Six Blooms' went to Mr. James H. McGhei. Mr. Archie Selwood won the 'Best Twelve Blooms in a Vase' and Mrs. G. W. Harvey, our President's wife, won in the novice class with her 'Pink Favourite'. The 'Best Six Blooms' in the novice class was won by Mrs. W. Ireland and lovely blooms from her climber 'Glendale' won for Mrs. Aileen Hicks the 'Best Bowl of White Roses'. Mrs. C. M. McKeracher won the 'Best Basket of Six' while in the children's section Cheryl Watt won with her 'Mrs. Sam McGredy'. Mrs. H. S. McLeod won the award for 'The Most Outstanding Decorative Arrangement'.

The show was greatly assisted by the number of Vancouver florists who sent in beautiful arrangements which were shown on a special stand, and were distributed to the various hospitals after the show.

The non-competitive display provided by Eddie's Nurseries

was never without an interested group of rose-lovers who kept Mr. and Mrs. Eddie busy answering questions on rose-growing as they wrote down the names of blooms that took their fancy. Jackson & Perkins also added a colourful touch to the show with their contribution of a collection of lovely blooms from their rose fields in California.

The Park Board, so generous each year with their display, again contributed greatly to the show with their masses of potted plants, both foliage and flowering, and staged most artistically against a background of young birch and eucalyptus trees.

After looking with envy at the beautiful blooms grown by the exhibitors the visitors crowded into the Ortho Educational picture show to learn how they too might grow prize-winning roses. If they were interested in starting from the beginning there was also Mr. Fred Blakeney's demonstration on how to grow roses from seed – with several lovely blooms of his own to prove it can be done if one has the time and patience. Those interested in flower arrangements kept Mrs. Keith Wiles and her assistants busy.

Rose culture we think is the most interesting and rewarding of all hobbies, for young and old alike. In case anyone should think they are getting too old for rose-growing they should contact Mr. Pound of Victoria who in his eighty-sixth year came over to the show, and was presented with a *boutonnière* of 'Sultane'; he is just starting to extend his hobby to propagation.

This report would not be complete without mentioning the wonderful influence the Educational Programme, provided at our monthly meetings, has had on our Rose Show. It was evident in the bench classes by a marked improvement in the quality of blooms and their correct classification; and in the floral arrangements by more skilful handling of material and a firmer knowledge of design. 1959 was a good show and we are already looking forward to a bigger and better in 1960.

A Day at the British National Rose Show

Jim Burston, London, Ontario

DURING the summer of 1959 my wife and I took the opportunity of revisiting England after an absence of thirty-nine years. Before coming to Canada in 1912 I was making my living at gardening, so was quite conversant with the methods and conditions of gardening there at that time. Gardeners the world over know of the fame of the British Isles for their roses and lawns.

Due to an exceedingly dry spring the English lawns took a severe beating and when we arrived (the latter part of June) many were already very brown, with watering restrictions in force. Where good cultural practices had been employed the growth of the roses seemed almost phenomenal.

We arrived in London two days before the British National Rose Show opened at the Royal Horticultural Society Hall. The morning of the show we arrived a little in advance of the advertised opening time and found a considerable crowd had already gathered for the show. I have been a horticulturist all my life, but must say that when the hall was opened I received the greatest thrill of my life. There before us in competition and on display were thousands of the most beautiful roses to be seen anywhere. All types and colours and the size and substance was tremendous. The competitive classes were greatly varied and well filled; the judges must have spent a great deal of time and thought before deciding the winners.

The Royal Horticultural Society Hall really consists of two halls and one is set aside for displays by growers. This too was filled with the most marvellous displays and no words of mine could adequately describe it; it would have to be seen to be appreciated.

I was greatly impressed by the number of people attending the

show, and it had not been open very long before it became difficult to see the exhibition comfortably.

In the early afternoon the show was honoured by Her Majesty the Queen Mother who is a great lover of roses, but due to the dense crowd and the difficulty of movement and proper protection, she stayed but a short time and was no doubt disappointed that she had not been able to see more of this great show.

Particularly was I impressed with the growing popularity of the floribundas as displayed at the show, and it would seem that not many years will elapse until they receive equal prominence with the hybrid teas. This is no doubt due to their more prolific flowering giving more colour to the garden and to the improved quality of the newer varieties.

I made note of the varieties that appealed to me, and am pleased to pass them on for what value they may have but we must remember that different varieties respond differently in different gardens, locations and seasons, and you cannot rightly appraise any particular rose as seen in a show room – or one season in the garden. These first notes are those taken in the competitive classes and include the most prominent winners:

‘*Perfecta*.’ H.T., cream at base overlaid shell pink with clear rose pink at petal margins. This was a persistent winner but would judge it may be difficult to grow well, judging from the difference shown in specimens exhibited by different exhibitors.

‘*Karl Herbst*.’ H.T., crimson, beautiful as shown here. The shape of ‘Peace’ and almost as large, very hard to beat in the kind of weather experienced in 1959; the substance truly remarkable.

‘*Message*.’ H.T., white, long-pointed, very fragrant, just medium size, hard to beat in this colour.

‘*Bettina*.’ H.T., bronzy orange, wonderfully attractive as a cut flower in an arrangement on exhibition.

‘*Burnaby*.’ H.T., light yellow, large bloom, excellent centre, pointed bud type with outside petals very reflexed.

‘*Chantre*.’ H.T., copper or chinese orange, very attractive, quite large.

- ‘*Ethel Sanday.*’ H.T., buff yellow, large flowers with great substance and full centre.
- ‘*Montezuma.*’ H.T., coral or salmon pink, wonderful form with large petals, very attractive, this variety is listed by some as a floribunda rose.
- ‘*Christian Dior.*’ H.T., scarlet, a truly model rose, very large high-pointed centre, with outside petals curling back and revealing a velvety sheen in comparison with the dull reverse.
- ‘*Concerto.*’ Floribunda, scarlet, single flowers, large trusses, very beautiful.
- ‘*Frensham.*’ Floribunda, semi-double crimson showing yellow stamens, 3 inch flower, thorny.
- ‘*Heat Wave.*’ Floribunda, orange red, 3 inch flower, quite double, very attractive.
- ‘*Korona.*’ Floribunda, orange scarlet, semi-double high centre, large trusses, appears strong grower.
- ‘*Queen Elizabeth.*’ Floribunda, well known pink, large flower, very beautiful as exhibited here.
- ‘*Anna Wheatcroft.*’ Floribunda, opening vermilion changing to coral red as the bud opens out. Prominent stamens enhance its beauty.

The following notes were made from observations of the growers’ exhibits with special attention to the newer varieties. I probably missed many as the crowds were so large and the attendants so busy that not much information was available from them regarding the peculiarities of each variety:

- ‘*Garden Party.*’ H.T., lovely cream, slightly tinted blush, little fragrance, outer petals spread wide, lovely centre.
- ‘*Lilac Time.*’ H.T., this is a McGredy introduction from 1956. Received a certificate of merit from the N.R.S. It is a peculiar shade of colour that probably will not appeal to everyone. Nicely shaped flower and McGredy’s advise using it in combination with yellow for table decoration or as a corsage with pastel coloured clothes. Some fragrance.
- ‘*Jerry Desmond.*’ H.T., rose pink, very clear large-sized full petals. Lovely specimen bloom for exhibition.

- '*Pink Peace*.' H.T., and is just about what the name implies. Rich rose colour with brighter edge. Fragrant.
- '*Ballet*.' H.T., clear rose pink of exhibition quality as it appears in the McGredy exhibit.
- '*Lady Zia*.' H.T., this is a brilliant red, quite large, high-pointed centre, lovely shiny foliage.
- '*Aztec*.' H.T., this variety looked like a glorified 'Independence' and may replace it.
- '*Stella*.' H.T., pink blend of peach and cerise. High centre with petals rolling back to produce an exquisite flower of fine form. Appeared to be of exhibition quality, quite fragrant with dark healthy foliage.
- '*Fantan*.' H.T., this is a new rose which has colours hard for me to describe and I cannot think of another rose that resembles it in colour. Those interested in new colours should try this. It seems to open as a blend between salmon and lilac shading to lime and caramel, an ovoid-shaped flower of vigorous growth.
- '*Angel Wings*.' H.T., pale gold edged rose, slender buds opening to round flowers, very fragrant. Would judge to be a good decorative rose for bedding or house decoration. Seen in the Wheatcroft exhibit but said to be a California origination.
- '*My Choice*.' H.T., cherry on pale yellow base, large flower, vigorous growth, very fragrant.
- '*Doris Norman*.' Floribunda, very attractive 2 inch flower, orange red in colour, semi-double.
- '*Red Dandy*.' Floribunda, lovely crimson scarlet about the size of 'Queen Elizabeth' and appeared to me to be a rose of great promise.
- '*Shepherd's Delight*.' A Dickson floribunda that received a Gold Medal in 1958. Orange red in colour with yellow shadings; 3 inch flowers, semi-double, large clusters.
- '*Channelle*.' Floribunda from McGredys, attractive puff pink with miniature H.T. flowers, appears vigorous and received a Certificate of Merit from the N.R.S.
- '*Iceberg*.' Floribunda, snow-white from McGredys. The best white I have seen to date. Gold Medal winner.

'*Passion*.' Floribunda, new descendant of 'Peace', 4 inch fiery red bloom appears very vigorous. Gold Medal winner in France.

The new species of roses headed by 'Queen Elizabeth' are acknowledged and named grandifloras throughout Canada, which leads to a great deal of confusion when visiting the National Rose Show in London, where they are classed as floribundas and I did see them listed as hybrid teas in some instances. It would not require much imagination to classify 'Montezuma' as a hybrid tea.

We spent many hours enjoying the show with its heavy perfume and the tremendous spectacle of colour provided by many thousands of the finest roses to be found, and it was with great reluctance that we had finally to leave the building. Many times since that day I have re-lived this wonderful experience, and I would urge all lovers of the rose who may be in England at the time of the National Show to see it and enjoy the thrill of their lives.

The Technique of Rose Photography

Jerry Field

TODAY, it's more than likely if you see a rose in any other frame than its natural garden habitat, or the background of a flower show, it will be in the familiar cardboard mount of a colour slide.

More and more rose growers are taking colour slides of their favourite roses, to preserve their beauty for their own enjoyment, and to use in lectures before garden clubs and other interested groups.

Colour prints are also being used with increasing frequency, particularly as the tremendous improvements which have been made in colour print materials have improved the colour rendition, so important to the rose fancier. The colour transparency, though, still remains the favourite because of its greater brilliance and realism, and particularly because it is so ideally fitted for audience showings.

Any camera which makes colour transparencies will do. These include the 35 mm. cameras, the cameras taking the 8-exposure 828 film and more recently those using 127 film. The latter give somewhat larger square transparencies which also come in the standard 2×2 mounts, permitting their projection with a standard projector. Of course larger transparencies may be made with a larger film for regular lantern slide projection. They will have the advantage of greater sharpness and greater detail, although 35 mm. transparencies taken with a good camera with a good lens are completely satisfactory for showings for almost any screen size.

To take close-up pictures of your roses, you will need a close-up lens attachment. This slips on over a regular camera lens, and enables you to focus your camera for much closer working distances. These lenses generally come in a 1+, 2+, and 3+

designations, the 3+ being for extremely close working distances. The lenses may also be combined for still closer work, although this should not concern the rose grower. The 1+ lens permits you to photograph large plants or clusters of blossoms at a distance of 40 inches. The 2+ lens is suitable for filming average size plants at a distance of 20 inches. The 3+ lens is used at 13 inches for close-ups of single large blossoms and small plants. A 2+ and 3+ combined will permit you to work at 8 inches. The 3+ lens is generally satisfactory for portraiture of single rose blossoms.

Of course you must realize that in close-up photography the range of sharpness is very shallow. When using a 3+ lens, flowers from about $12\frac{1}{2}$ to 14 inches distance will be sharp for a miniature camera set at $f/8$. This $1\frac{1}{2}$ inches is hardly more than the depth of a large rose blossom. As a result, it is obvious that any leaves or background will be out of focus at this aperture. By stopping down to a still smaller lens opening, the depth of focus will be increased. However, it is always important to measure the distance from the camera lens to the blossom to be photographed as accurately as possible.

This brings up the need for the second most important accessory in serious flower photography . . . and that is a tripod.

The reason for its use is obvious, as you must measure the distance very carefully, and may have difficulty in maintaining it while focusing. It is also possible that to obtain sufficient exposure while stopped down, it will be necessary to give a longer exposure that you could safely use with a hand-held camera. You can measure the distance from the lens to the flower with a tape-measure or a ruler . . . or, more simply, tie a piece of string to the portrait lens and place a knot in it at the working distance you have selected. Using this method, and by dropping the string, it is even possible to hand-hold your camera under some conditions, although it is not recommended for the best results.

Close-up photography also requires special care. The viewfinder of your camera is designed for distances of several feet and beyond. Because the finder is above the camera lens in most cases, it sees an area above that which the camera lens sees when you are working very close. At 1 foot from the camera you may very

well have one-fourth at the top of the picture scalped off, ruining its effect. One way to compensate for this is to place a piece of tape on the finder about one-quarter of the way down from the top when you are using a 3+ lens; correspondingly, one-sixteenth and one-eighth of the way down for the 1+ and 2+ portrait lenses. Then to make your camera see the same thing that you do look through the finder and tilt the camera up. Tilt it until what you could see through the topmost part of the finder is at the one-quarter mark, or the mark you are using. Of course certain of the newer cameras are the single-lens reflex type, permitting you to view your subject directly through your taking lens. This completely eliminates this problem. Another way of solving the problem is with the use of a rectangular wire frame, rigidly attached to the front of your camera. This takes care of both focusing and the framing problem. You can make such a frame yourself from coat-hanger wire or you can purchase one through your camera dealer. However, one point to be stressed in using such a focusing frame, is to watch out carefully for the shadows cast on the flower by the frame itself, as most of your rose pictures will be taken outdoors in the sunlight and you will not have the control over the light which you would have in indoor photography.

No colour film has yet been designed for making precise colour records of flowers or other objects. However, if you watch your exposures carefully, you can in general get completely satisfactory colour rendering. Because the colour of roses varies so and because the colours are so important for identification of the flower, it is important that you take every precaution to get as true a colour as possible. Some of this you will do by experimentation and you'll learn through experience.

Most of your pictures will be taken with sunlight, so no filters will be necessary. However, it will be well to observe the angle of the sunlight, the time of day, and the amount of blue light reflected from, say, a north sky. The latter will tend to blue the shadows, and in the case of a pink or red rose, create an unnatural purple. In the case of a yellow rose, a green shadow. This can be largely eliminated by using a white card reflector or an aluminium

foil-coated card as a reflector. You will also probably want to use such a reflector to project the light down into the heart of the rose, since that too is generally important to the character of the flower. Usually to obtain the best quality of light you will want to make most of your pictures between ten in the morning and two in the afternoon. A slightly overcast day will eliminate the possibility of blue shadows and will give you a soft diffused light.

Your white reflector should be used on the shadow side of the subject to brighten the harsh shadows generally present in clear sunlight. Cross lighting will emphasize petal texture; back lighting will catch the beauty of sunlight passing through the petals to show their translucence. For cross lighting set the lens one-half opening larger than usual. For back lighting, one opening wider.

While on the subject of exposure, you will do well to use an exposure meter because in close-up photography of this nature it is almost impossible to judge accurately the amount of light present.

Backgrounds are important in rose pictures. Good soil, peat moss and the like in many cases make an excellent background, particularly since it will be out of focus. However, if the picture will be cut by the edge of a lawn or something of that sort, it may be quite confusing. In this case and in many cases, it is desirable to use a plain coloured cardboard or fabric background which will emphasize the colour of the flower by contrast, and will more clearly outline the foliage and the flower itself.

Another problem which the rose photographer has to contend with and which the photographer of, say, African violets does not have to worry about, is the problem of movement. Most of your pictures will be taken outdoors, and on most days there is some breeze present, at least sufficient motion in the air to move the flower or leaves sufficiently to spoil the picture. A portable wind-screen made of a piece of burlap and two pointed sticks makes a very handy accessory placed far enough from the flower so it does not interfere with the lighting, but will cut off the wind. Cardboard can also be used of course, and in an emergency you can shield the plant as much as possible with your body. Blooms on long stems which are inclined to bob and wave in the slightest

breeze can be supported by the usual metal support positioned so it will not show in the picture.

Good grooming is an essential to good rose photographs and a pan of water, a camel-hair brush and a pair of pruning shears will probably make up a most valuable kit of accessories.

Of course you will pick off any damaged petals on the outside, and you will use the brush to open the blossom or to rearrange the petals or to brush out any dead aphids which may be present. Blowing into the heart of the blossom may also be done to open it up sufficiently for your picture purposes. In removing any faded blossoms or foliage with the pruning shears, always remember to cut at a slant away from the camera because the dot of white from a pruned stem, if it shows, will stand out in your slide like a sore thumb. All damaged leaves, of course, would be carefully removed.

While it is never permissible at a rose show, it is sometimes allowable when making pictures to oil or butter the leaves slightly to increase the sheen and to pick up highlights on the foliage.

If you want to secure the effect of dew on the rose, sprinkle the water on them with your fingers. This will give you drops of varying size and look much more realistic than if you use a spray which would give you drops of uniform size. All spray residue, of course, should be washed off the leaves and stems where it will show in the picture.

It is said that half the pleasure of any hobby is the constant striving for perfection. If that is so, the rose fancier, who has for years attempted to grow the perfect rose, will double his pleasure as he reaches for perfection in portraying his roses with his camera. Rose photography, while a real challenge to the amateur photographer, is also extremely rewarding, particularly in the long winter months when the bushes lie dark and dormant under a mantle of mulch and snow. Then he can enjoy his slides and dream of the pictures he will get in the summer to come.

(Courtesy of Canadian Kodak Co. Limited)

Recent Trends Among Floribunda Roses

Leonard Hollis, East Horsley, England

PERHAPS the most remarkable post-war trend in roses has been the progress made among the floribundas. Those who were not rose enthusiasts in the 1930's may find it difficult to believe that we had then only one yellow variety – 'Poulsen's Yellow', and this was introduced only just before the war – in 1938. As a matter of fact few had any opportunity of growing it until after the end of hostilities. I had it until a year ago and it always did well with me, although the flowers and growth were thin, and the richest colour very fleeting.

The yellow group has since gone from strength to strength. Among many of comparatively tall habit, 'Faust', 'Gold Marie', 'Sandringham', and 'Golden Rain' (Goldregen) are clearly of garden merit and thoroughly hardy in this country. All four hail from Germany, and the first-named seems to have made the most favourable impression here, although 'Gold Marie' is little known as yet. Those of more compact bedding habit, which will appeal to the owner of the small garden, include 'Allgold' and 'Yellowhammer', both with excellent colour intensity and stability, transcending the older introductions such as 'Goldilocks'. Both were raised in the British Isles and were awarded the Gold Medal of the N.R.S. It will take an outstanding yellow to oust the aptly-named 'Allgold' on its performance here, as it shows all-round merit. Another in an unusual shade of orange yellow, quite distinct from the golden yellow group, is 'Copper Delight', with a compact, bushy habit similar to that of 'Allgold', and from the same raiser. The flowers are not quite so full and not as showy in the garden, but it does offer possibilities.

The 'Fashion' group of floribundas, offering a delightful colour range from salmon orange and coral to the most vivid salmon

red, orange flame and light vermilion, virtually to the fringe of orange scarlet, represents one of the most important colour breaks of recent years. 'Fashion', 'Nymph', 'Oberon', 'Countess of Dalkeith', 'Miracle', 'Border Coral', 'Spartan' and 'Dickson's Flame' may all be considered to fall naturally within this group, with the last two very close to the border-line of the orange scarlets. The proneness to rust of 'Fashion' has compelled some growers to discard it here, and doubtless has encouraged hybridists to produce healthier varieties, with greater disease-resistance, while retaining or even intensifying the delightful colouring of 'Fashion' herself. 'Anna Wheatcroft' and 'Vilia' are two further recent additions to this colour group, but with fewer petals, their beauty reaching its peak in the dainty, fully expanded flower. It should be noted that 'Spartan' is too full to open satisfactorily in a wet season here, such as 1958.

'Masquerade' is another floribunda of novel and varied colouring, belonging to the post-war era, which has founded a dynasty of its own. This multi-coloured rose has become one of the best sellers in this country, and hybridists the world over have used it extensively in their breeding programmes. As a result, numerous so-called improvements, claiming richer colour combinations or more petals, with better bloom formation, and in some cases fragrance too, have been marketed. Perhaps 'Circus' and 'Sweet Repose' are the best known of these multi-colours here, which include 'Angela', 'St. Pauli' and 'June Opie' from Germany; 'Tabarin' from France; 'Alison Wheatcroft' from England; 'Salute' from Northern Ireland, and 'Rumba' from Denmark. I have been particularly impressed with 'Alison Wheatcroft' during the exceptional drought of 1959. Some critics consider it to be too close to 'Circus', but I have them growing side by side and they are quite distinct in growth and foliage, as well as the flower formation and colouring. With me, 'Alison Wheatcroft' has fewer, but slightly crimped petals, of more intense colouring than 'Circus' – apricot orange, very heavily flushed and suffused with crimson – with attractive reddish bronze young foliage.

The development of the lavender, mauve, coffee and tan shades

from the original 'Lavender Pinocchio' is proceeding steadily in the face of a certain amount of prejudice among the more conservative growers. 'Lavender Lady', from England; 'Magenta' and 'Gletscher' and more recently 'Lavender Lassie' from Germany, are interesting introductions in pastel shades of lavender, lilac and mauve, which offer additional scope to the floral decorator. 'Magenta', in particular, is sweetly scented with a characteristic musk perfume. 'Café' and 'Brownie', both aptly named, provide further interesting possibilities for flower arrangements in *café-au-lait* and milk chocolate tones respectively, although their value as garden plants is somewhat limited.

'Madame Leon Cuny' has impressed me at the National Rose Society's Trial Ground as a distinct break among the floribundas, with a bi-colour effect of deep rose redder on the inside, intensifying with age, and white on the reverse in a flower of hybrid tea formation, like a miniature of 'Grand Gala'. While not a showy variety like the 'Fashion' and 'Masquerade' groups, it has quality in the individual bloom and is descended from 'Peace'. It is obviously nearer to the hybrid teas than to the typical cluster flowered floribundas, and its flowers are carried mainly in threes or fives, with some single blooms. Another attractive red and gold bi-colour with large, fairly full flowers is 'Tambourine'. This is a very strong grower, with the deeper colour varying between vermilion and carmine, according to the weather.

The orange scarlets are probably now the largest individual colour group among the floribundas, having developed by leaps and bounds from the early varieties, 'Independence' (Kordes Sondermeldung) and 'Tantau's Triumph' (Cinnabar) both of which are descended from 'Baby Chateau'. There are now so many in the group that space allows mention of only one or two of the latest brilliant additions. 'Highlight', 'Korona', 'Sarabande', 'Paprika', 'Orange Korona' and 'Meteor' seem to indicate that something approaching the ultimate has been reached in sheer brilliance. Colour stability under varying weather conditions must be the quality offering most scope for improvement, apart from fragrance. Mention must be made, too, of 'Orangeade',

which approaches closer to a pure orange than any other floribunda I have seen, although there is some vermilion in its make-up, probably more noticeable in the autumn. In hot sunshine it positively dazzles with its colour intensity.

'Columbine' is an interesting floribunda, having a creamy yellow groundwork, with a distinct piestic edge of pale pink to each petal. This, coupled with its full hybrid tea formation, has inspired the description of 'Peace in miniature', and there is some fragrance. It is not a showy variety, but pleasing to those who can appreciate the delicate shades. If the piestic edge were in a deep carmine it would also be a very striking rose.

The trend over recent years towards floribundas with larger individual flowers, resembling miniature hybrid teas, continues. A concomitant of this seems to be smaller trusses or clusters, which presumably is inevitable with the greater weight of the individual blooms. Three extreme illustrations of this type are 'Queen Elizabeth', 'Passion' and 'Miss France', all classified as grandifloras in the U.S.A. but not officially recognized as such here. Complaints are sometimes heard that by approaching so closely to the hybrid teas the floribundas are sacrificing their distinctive characteristics. But when one thinks back to the earliest introductions, such as 'Else', 'Kirsten' and 'Karen Poulsen', or even the full-petalled 'Anne Poulsen', and compares them with modern varieties of shapely formation, like 'Chanelle', 'Iceberg', 'Ivory Fashion', 'Sweet Repose' and 'Spartan', one has to admit that the hybridists have achieved wonderful results, not forgetting at the same time that some fragrance also has been introduced into a group which, shortly before the war, was almost entirely devoid of scent. The colour range, too, which up to 1938 was restricted to shades of red and pink for all practical purposes, is not almost as comprehensive as that of the hybrid teas, offering much greater scope for pleasing and effective colour schemes in mass plantings, both in public parks and the larger private gardens.

Making and Maintaining Your Garden Carpet

T. J. Heeg

*Associate Professor, Department of Soils, Ontario Agricultural College,
Guelph, Ontario*

THERE is no single item which adds more to the beauty of a home than green grass. Look at any new sub-division. A beautiful home is completed, and often the tenants move in before the grass is seeded. What a difference the grass makes! And it is not all beauty. It has practical implications as well. It keeps the house clean – there is little dust or mud.

Any lawn, even a weedy one, serves the practical purpose of dirt-control. However, the better the lawn the more beautiful it is, and the greater is its property of enhancing real estate values. The difference in cost between a good lawn and a poor one is really quite small at the time of establishment. Later, considerable money may have to be spent if a poorly constructed lawn is to be corrected.

Probably the first consideration in making a lawn is the grade. Be sure drainage is adequate. Tiles may be necessary in poorly drained areas. Water standing on soil for short periods of time will not be too harmful by itself because grass likes lots of moisture. However, in late fall, winter and spring, ice may form, cutting off air and giving rise to winter-kill. Even in summer after a heavy shower pools of water create soft soil conditions. Walking on such an area before it has dried will cause soil compaction. Compacted soils lack air so that grass roots absorb nutrients with difficulty and soon the lawn looks poorly.

THE TOPSOIL

An important consideration in lawn-making is the topsoil itself. The amount of topsoil necessary to maintain the lawn in the

years to come varies under different conditions. In the Ancaster area, I have seen sandy loam subsoil used as topsoil with excellent results, provided adequate fertilizer and water are used. Ordinarily, subsoil is an extremely poor substitute for topsoil and cannot be generally recommended.

Grass will grow in any good topsoil regardless of texture. Texture refers to the size of particles making up a soil. The terms sandy loam, or clay loam are descriptive of texture. Clay particles are so small they cannot be seen under a microscope. Sandy particles are large and are easily seen with the naked eye. Silt particles are in between sand and clay in regard to size. Soils are a mixture of these three kinds of particles. When a soil contains 30 per cent or more clay particles it is called a clay. A typical loam soil will contain 20 per cent clay, 40 per cent sand, and 40 per cent silt. If a soil contained 15 per cent clay, 65 per cent sand and 20 per cent silt it would be called a sandy loam. A soil is a sand when it contains 85 per cent or more of sand particles. So with varying contents of particle sizes, soils may be called clay, clay loam, silty clay loam, silt, silt loam, sandy loam and sand.

Also of importance in understanding your soil is physical condition or structure. Sandy soils have good structure. Clay soils are often a problem because of poor physical condition. Sand particles do not cling to each other but clay particles do so strongly. This makes them plastic when they are wet and almost cement-hard when dry. Organic matter with clay helps to alleviate physical problems but will not overcome them entirely. Organic matter or humus smearing the clay particles lessens the tenacious attraction they have for one another.

In lawn making, structure is important right at the start. After the grass is established it will create and maintain excellent structure. As a matter of fact, grass is the best builder of soil structure of any species of plant. However, if structure is poor at seeding time it may impair establishment of the seedlings. On drying, there will form a hard crust which the seedlings may not be able to pierce.

To give a soil better structure at seeding time use some organic material – particularly on heavy soils. This is not too expensive on

small areas. The best organic material is probably sphagnum peat moss. Black mucks or brown sedge peats will do as well. Some cities compost and grind up their leaves and market the product as leaf compost. This also is good. Use about one bale per 1,000 square feet and mix well with the top inch of soil.

Organic additions are also beneficial in sandy soil because organic matters hold more moisture than sand. This is beneficial not only at planting time but also later when the grass is established.

THE SUBSOIL

One other item is important in making a lawn and that is parent material or deep subsoil. Usually this is the material from which the original topsoil was derived through the years and so the name parent material. It may be gravel, clay, sand or even gravel with stones and boulders. Gravelly subsoils will give excessive drainage which will cause the topsoil to dry out quickly. Clay parent material will likely give slow drainage. Such a condition will likely call for tile to assist taking off the water in wet seasons.

DEPTH OF TOPSOIL

Considering all these factors we are now in a position to discuss depth of topsoil. In general, the deeper the topsoil the better your grass will be. If the parent material is gravel, at least 6 inches of topsoil will be necessary. Coarse sand, as parent material, will require a similar covering. Fine sand and clay should be covered 3-4 inches with topsoil. All these depths are minimum values.

The question may arise as to the kind of topsoil to use. If the area surrounds a new home, usually the topsoil from the house area has been piled. This should certainly be used, placing it over the new lawn area to give the depth of topsoil as discussed above. If such a pile is not available it will be necessary to purchase topsoil. A good loam is probably the best for all purposes. However, if you are in an area surrounded by sand or clay, loam may be too costly to buy because of long transportation hauls. Purchase, therefore, any good topsoil regardless of texture. It should be as dark-coloured as possible for the area - the darker the soil the more organic matter it contains. However, it is almost impossible

to obtain sandy soils high in organic matter unless they come from a poorly drained area. Perhaps one thing might be mentioned as a guide. Buy topsoil that has been in sod for at least a few years. Sod gives a soil good structure, and will ensure that organic levels will be at a high point for that particular soil, whatever its texture.

Don't use organic soils – peat or muck – as topsoil. As mentioned earlier, these materials are useful additions for mineral soil, but should not be used in the pure state as topsoil. In wet weather they hold too much moisture, making the ground too soft. In addition, once these soils dry out they are most difficult to wet again.

FERTILIZERS BEFORE SEEDING

A soil test is probably the best way to assess the right fertilizer for any particular soil. However, it will take a few weeks to have a test report back, and often the lawn maker cannot wait that long. It is more important to get the job done at the right time. A few weeks of waiting may put the seeding date into an undesirable period.

Probably the topsoil you are using has not been heavily fertilized, particularly if it is from an old pasture. In most cases these fertilizer recommendations will apply as a preparation for seeding.

On sands and sandy loams use a 5-20-20 fertilizer. On loams and silt loams and even clay loams a 5-20-10 fertilizer could be used and on heavy clay soils use a 5-20-0 fertilizer.

Some fertilizer companies now make a special pre-seeding lawn fertilizer of analysis 10-20-10, containing Urea-form nitrogen. This would be a good substitute for any of the previously mentioned fertilizers on any texture. All these fertilizers should be applied at the rate of 25 lb. per 1,000 square feet. The fertilizers above assure a good supply of phosphate for the seedlings and also for future use. The middle number in the fertilizer is phosphate. The first number is nitrogen and the third number is potash. Nitrogen and potash tend to burn seedlings if present in too high amounts.

Potash is higher in the fertilizer recommended for sands. This is because sands are naturally low in this element. On the other

hand, clays are naturally high in potash and don't require large additions as fertilizer. All members of the grass family have a low potash requirement but it does perform a function in keeping grass healthy.

All soils are generally low in phosphate regardless of texture. Add to this the fact that grass has a high phosphate requirement. Therefore, grass fertilizers should contain adequate phosphate. It is very necessary for good root development and health and vigour of the plant.

Nitrogen forms a part of chlorophyll which is the green colouring matter of plants. Therefore, if grass is to be green, nitrogen should be present in adequate amounts. It is also a growth promoter. However, because it could burn young seedlings it is well to limit the amount of nitrogen at the start. This is why mixtures containing only 5 per cent have been recommended here unless non-burning nitrogen carriers are used. More nitrogen can be added with good results after the grass has been mowed a few times.

APPLYING THE FERTILIZER AND ORGANIC MATTER

Spread the topsoil over the lawn area to the depth recommended considering parent material. Level it roughly at this stage and break up the lumps to form a good seed-bed. Now spread the fertilizer over the soil. If the soil is sandy and if an organic material such as peat is to be applied, put it on at this stage. Then work both the fertilizer and organic addition into the top 4 inches of soil.

If the soil is clay, apply the fertilizer and work it into a 4-inch depth. Then apply the organic matter and work it into the top inch. You can, of course, work the organic matter into the top 4 inches of soil as in sand, but it will require more organic material. The reason for adding organic matter to clay is to improve the physical structure in the top inch so the seedlings may have a better chance of surviving. In the case of sand you want to improve the moisture-holding capacity as deeply as possible.

SEEDING

You are now ready to finish preparing the seed-bed. Rake the treated topsoil to level off minor depressions. The area should then

be rolled to make the soil firm. After rolling, rake again, smoothing off any depressions which show up. Now apply your seed. This can be done by hand or with a mechanical device such as a cyclone seeder, broadcaster or drill. If applied by hand seed lightly one way and then seed again walking at right angles to your first seeding. It is also a good practice to mix the seed half and half with fine sand or some other suitable dilutant to help obtain a uniform seeding without too heavy an application. It usually applies that the better the grass mixture, the less seed is required per unit of area. Usually 4 to 5 lb. per 1,000 square feet is sufficient.

After seeding go over the area with the rake upside down so as to barely cover the grass seed. Then roll the area again. If no rain is in the offing, water with a gentle spray. Water is needed – never let the top $\frac{1}{2}$ inch of soil dry out completely.

Grass seed mixtures of high quality are obtained from any reliable seed company. I would suggest that readers refer to Bulletin 448 entitled 'Lawns', published by the Ontario Department of Agriculture. In this bulletin a description of all lawn grasses is given and need not be repeated here. The basis of any good lawn mixture is the good old standard Kentucky blue grass. With it may be mixed other quality grasses in varying proportions. The best of these grasses are Colonial bent and Creeping red fescue. Another quality grass is Merion blue grass which is a selection of Kentucky blue and not really a new variety. The author has a patch of Merion blue and from three years' experience with it, I can say that it is an excellent grass. It is greener than Kentucky blue, but in criticism one can say it is coarser. It requires regular feeding and watering – more so than Kentucky. It is also reported to be more susceptible to disease, particularly the rusts, but I have been fortunate not to have had any disease troubles in a three-year period. It forms a close turf – so close that the neighbour's crab grass hasn't made any headway. When the odd crab grass plant does come in, it is easily seen because of its light green shade against the dark green of the Merion blue. It can therefore be easily plucked out before making any headway.

Another grass making a better than average lawn is Colonial bent grass. All are familiar with the fine bent grass turf of golf

greens. However, for the average person this type of grass needs too much special attention. It needs frequent feeding and watering. It requires frequent close clipping and is very subject to diseases such as brown patch and dollar spot. Watering should be done in early morning rather than at night so that the grass is not wet for long periods at a time.

SOME RECOMMENDED SEED MIXTURES

Where water is available throughout the summer and on heavy and medium textured soils (clays, loams and perhaps even the sandy loams), use half and half Kentucky blue grass and Colonial bent. If water is scarce on these soil textures, use 70 per cent Kentucky blue grass, 10 per cent Colonial bent and 20 per cent Creeping red fescue.

On light soils (sands and sandy loams), where water is available use Kentucky blue grass 50 per cent and Creeping red fescue 50 per cent. A little Canada blue grass is sometimes recommended here but it is too coarse for a fine lawn around rose beds. If water is not available on light soils, increase the proportion of Creeping red fescue to 60 or even 70 per cent with Kentucky blue from 30 to 40 per cent. The more severe the drought condition, the more Creeping red fescue should be in the mixture.

In cheaper grass mixtures you will inevitably find rye grass. This is a fast germinating grass but is coarse and not too permanent. White clover also appears in grass mixtures but is not to be regarded as inexpensive. Personally, I would not recommend clover in the seed mixture. No doubt it remains green in droughty periods because of its deeper root system, but it has some bad qualities. It is inclined to grow in patches. It is a different shade of green from most grasses. It stains clothing much more than grass, and it is a naturally occurring legume which will come in by itself without seeding. In other words clover will grow whether you seed it or not — just give it time, and it is hard to eradicate.

TIME TO SEED

The best time to seed a lawn is from late August through September. Sometimes October seedings are O.K. but it will

depend upon the fall. Usually the earlier the seeding the better the grass will be established before hard winter frosts. However, I have seen seeding done in late fall and the seed barely germinated when cold weather arrived, and the grass came along well in the spring. I wouldn't recommend this unless absolutely necessary. The second best time to seed is in the spring. Wait until the soil is dry enough to work without making it into a putty. This is particularly true of clay soils. Nevertheless, seeding should be done by late May – the earlier the better. The hot weather of June, July and August is hard on young grass. Grass should be well established by 1 June. Remember Kentucky blue grass takes two to three weeks and sometimes longer to germinate.

If the grass were seeded in the fall, no further treatment except mowing will be needed until spring. The first mowing can be made when the grass is about 3 inches high. Rake it if the clippings are heavy, so they will not smother the new grass. The mower should be set to leave 2 inches of grass blade. Remember, the tops manufacture food for the roots – so don't mow down the manufacturing plant. Mow as necessary letting the grass go into the winter with $2\frac{1}{2}$ to 3 inches of top. Early in the spring when the frost is out of the soil, and when you can walk on the ground without showing foot-marks, rake the grass thoroughly but not so hard as to pull out roots. If there are bare spots caused by winter-kill, work up the soil and re-seed with the same grass mixture you used in the fall. A different mixture will give a different texture, and perhaps colour, which will show up as a patch. After doing this give the grass a nitrogen treatment. Probably the two materials giving good response for a low price are ammonium nitrate containing 33 per cent nitrogen and urea with 45 per cent nitrogen. The ammonium nitrate should be applied at not more than 5 lb. per 1,000 square feet and the urea at $3\frac{1}{2}$ lb. per 1,000 square feet. Then roll the lawn area. Adjust the weight of the roller so that you do not promote soil compaction. All you want to do in rolling is to press down the grass roots which were raised up by frost action. This takes out minor bumps. Never roll a lawn with the idea of flattening out all unevenness. In the first place it is hard

to do, and in the second place the soil may get so compacted that the roots can't breathe or operate properly.

The two nitrogen fertilizers above will burn green grass if applied when the grass is wet. Apply the fertilizer only on dry grass and rake it off the leaves. Walking over the grass with an upside-down rake behind you will do this. If you do burn the grass it will be only temporary unless excessive fertilizer were used.

However, if you fear burning grass with ordinary nitrogen fertilizers you can buy non-burning fertilizers. At least four companies are marketing this type. The nitrogen in such fertilizers is called Urea-formaldehyde, often shortened to the name Urea-form. This name is usually on the bag which you buy. Examples of such fertilizer are 10-6-4, 6-10-4 and 6-9-6. Note that these are all mixed fertilizers containing phosphate and potash along with the nitrogen. The pure Urea-form nitrogen doesn't seem to be available from many outlets but one seed company advertises it as 38 per cent nitrogen, selling for \$17.00 a 50-lb. bag. This is a fantastic price and it should be reduced in the near future.

After the initial nitrogen treatment in the spring, a good rain, and milder weather, your lawn should be off to a great season. For maintenance of your lawn in future years follow the steps outlined later for older turfs.

SODDING A LAWN AREA

If you wish to sod an area rather than to seed, remember it will cost you considerably more. The advantage of sod is that you have a grass cover immediately. In buying sod you will get what you pay for. You may buy pasture sod or nursery sod. The pasture sod may be anything – weeds, clovers, grasses chiefly Canada blue or even some timothy and orchard grass. Usually the grasses are coarse and not suitable for a good-looking lawn. Sometimes you are lucky and get pasture sod containing bent grasses which were growing naturally, but this is rare.

Nursery sod will cost you two to four times more than pasture sod but it will be worth it. These sods are grown specifically for gardens and usually contain the finest mixtures. Be sure of them

when you buy. Enquire about the grass mixture and don't buy if any coarse pasture grasses are in their make-up.

Before putting the sod down, follow the same rules outlined for seeding. Have sufficient topsoil below the sod. Placed on subsoil, the sod, even good mixtures, will be most difficult to maintain.

If the soil is dry, water it well, then let it dry for a day before laying. When laying the sod, walk and kneel on a wide board so depressions and holes are not made in the new sod with your knees and feet. After the sod is laid, fill in the cracks where they appear with topsoil. Fertilize with 10-6-4 at 10 lb. per 1,000 square feet. Water it well and let it stand for at least a week. Then it may be rolled to smooth out the rough spots. Mow it when it is about 3 inches long. In two to four weeks the sod should have knitted itself to the soil below and from there on only maintenance is necessary.

WEED CONTROL

Weed control is usually necessary in newly seeded lawns in the first year. All soil contains weed seeds, some of which have been dormant for years. As soon as the soil is exposed to the air, these seeds germinate and come up with the grass. If fall seeding were done the annual weeds would be killed by frost before they could set new seed. The perennial weeds, however, are not so killed. It is, nevertheless, usually necessary to spray at least once with 2-4-D. The manufacturer's instructions should be followed when using the weed-killer. Spraying should be done only after the grass is well established.

CARE AND MAINTENANCE OF ESTABLISHED SODS

Older lawns fall into two major categories. In the one, the depth of topsoil is good and in the other it is poor. If there is only an inch of topsoil over gravel there is little hope of maintaining a good lawn. The grass might be good for about a month in the spring. Because the soil dries out so quickly, it becomes weed-infested and what grass is left becomes brown. No amount of fertilizer will help this situation. There just isn't enough water-holding capacity.

If a good lawn is desired in such an area, I know of no other method than to hire a front-end loader and a truck and have at least 6 inches scooped off the top and hauled away. You might try to save the little topsoil, but if it is this shallow, it will probably be less costly to haul it away too. Fill in the scooped-up area with new soil and re-seed. The cost of the operation will probably be about \$75.00 per 1,000 square feet. This may sound like a lot of money but the results are permanent. It is a source of amazement that many persons will spend hundreds of dollars on furnishings for the inside of the home, but hesitate to do a proper job outside. When you stop to think of it, more people see the outside of your home than the inside, and first impressions can be lasting ones, so if you do have to spend a few hundred dollars on the outside, look upon it as a permanent investment, paying dividends in appearance, and as a source of personal pride. With a little maintenance each year, it can be good looking for your lifetime.

In older lawns which have a good depth of topsoil, and where the stand of grass is reasonably good, they can be brought into good condition with little trouble. Thin spots should be forked to a 2-3 inches depth and then re-seeded. If the whole area is thin and unthrifty, perhaps it should all be cultivated and re-seeded. Usually, however, spot seeding is all that is necessary.

Maintenance fertilizers for established lawns can be 10-6-4, 6-10-4, or 6-9-6. If the lawn hasn't been fertilized for a few years apply 10-15 lb. per 1,000 square feet in the spring, followed by a 5 lb. application about 1 July and again 1 September. If the lawn has had regular fertilizer treatments in past years, apply 5-10 lb. in the spring, 5 lb. about 1 July and again about 1 September. All rates are for 1,000 square feet. In many cases, the 1 July application may be omitted.

Top-dressing a lawn with soil is not generally required unless there are depressions which you wish to fill. The soil on which the grass has been growing won't wear out, but unless you fertilize it regularly, it will become deficient in fertility, especially nitrogen. The grass roots are continuously growing and dying, so the dead roots regenerate and even build up organic matter. Don't use brown or black organic soils for top-dressing. The continued

addition of such materials will gradually build up an organic layer over the mineral soil which can be harmful.

Rolling is usually required in the spring on a lawn area. Too much or too heavy rolling will cause compaction and will necessitate spiking the lawn. Spiking is merely the process of making many small holes the diameter of a lead pencil and 1-2 inches deep. This permits air to enter the soil. Unless your soil becomes compacted, spiking is not necessary on lawns.

Mowing is an important maintenance requirement. Excepting bent grass, all other grasses should be mowed leaving $1\frac{1}{2}$ to 2 inches of blade standing. Too short mowing, especially in the heat of summer, is frequently the cause of grass failure. Bent grasses, on the other hand, like to be clipped short, $\frac{1}{2}$ -1 inch. When any grass is allowed to grow too long, there is a physiological shock to the plants when mowed short. Try to make it a rule never to mow off more than one-third of the total leaf surface.

Should the clippings be left on or taken off? It is all right to remove the clippings provided fertility is added frequently enough. If clippings are allowed to remain on the grass, they decompose and return their fertility constituents to the soil. If you remove them you remove some nitrogen, phosphate and potash. Don't waste them if you remove them. Put the clippings on the garden or compost them and dig them into the garden at a convenient time.

Clippings must be removed if the grass gets too long before you have a chance to mow it, otherwise, they will smother the grass below. Also, if you have a very dense sod, clippings may lie on top for days without falling through to the soil and are unsightly. So there are occasions when clippings should be removed. As mentioned before, this is all right provided you apply fertilizer regularly as outlined above.

Grass should be mowed as frequently as needed. This may be every four or five days in the spring or once in two weeks in hot dry weather. Don't let grass get too long in the active growing period particularly. Remember also that grass has a natural dormant period in hot dry weather and the mower should be on the dormant side then as well.

WATERING THE LAWN

Watering the lawn is another important maintenance requirement. Watering is best done, when needed, in the morning hours. This means that the grass can become dry again during the late morning and afternoon. With evening watering the grass remains wet all night and this moisture provides ideal conditions for development of diseases such as Dollar Spot and Brown Patch. As true as this might be, the great majority of people have more time for watering in the evening and this is when most of it is done. Being realistic, if watering is done in the evening do it as early as possible so that the grass has a chance to dry off before nightfall.

Keep in mind that two good soakings per week are better than a light sprinkling every night. Light sprinklings promote shallow rooting making the grass more and more susceptible to drought. Put coffee-tins or other containers around the sprinkling area, and don't move the hose until at least $\frac{1}{2}$ inch of water has accumulated in the cans. The worst enemy to the home gardener is the supply of water available in many municipalities. Unfortunately, little can be done about this and watering must be rationed to meet local by-laws. The only suggestion offered here is to not let the soil become dry after a good rain. In other words, if it rains one day, don't wait for four or five days before you begin watering again. If you do, you will never catch up. Water the day after a rain, and keep rotating your sprinkler in a new area each night during watering hours. In this way you are not letting the soil become bone-dry before starting to water, in which case you are behind all the time.

VARIOUS MATERIALS OFFERED FOR LAWNS

Sewage Sludge. This is an organic which is probably better used in the garden rather than on the grass. The best product offered for sale contains 6 per cent nitrogen and 2 per cent phosphate. Grass needs more phosphate than this. It has some other disadvantages for grass – because it is organic it may promote the growth of snow mould in the cool spring when the grass is snow covered. Don't use it after 1 September. This also applies to poultry and sheep manure.

If sewage sludge is used on grass, apply it only in the spring and midsummer and apply superphosphate with it at the rate of 5 lb. per 1,000 square feet.

Sheep, Poultry and Other Dried Manures. These are low-analysis organic fertilizers. Many contain weed seeds which you don't want. As in the case of sewage sludge, they are better applied to the garden but should be bolstered with phosphate and potash.

Barnyard Manure. The chief criticisms of barnyard manure on a lawn are: its smell, it draws flies, litters up the lawn and it carries weed seeds. Again it is better used on the garden and dug in.

Liquid Fertilizers. There are two kinds of liquid fertilizers. Those for foliar feeding and those for soil treatment. Foliar feeding is applying the liquid as a spray on the grass blades. The grass absorbs the nutrients and is fed through the leaves rather than the roots. This actually happens, but the amount applied is not nearly enough for the needs of the grass. Stronger solutions will burn the leaves. The method is, therefore, expensive and impractical.

Liquid fertilizers for soil treatment are as good as solid fertilizers and at the plant where they are made they are much the same price. However, transportation and container costs are high. Add to this the special equipment you need to put enough liquid on the soil. On farms when proper equipment is available it is working well, but is too costly at present to be recommended for home use.

Trace or Minor Elements. I have yet to see trace element troubles on grass in Canada. There seems to be enough iron, boron, manganese, zinc, copper and molybdenum for grass in our soils. Our chief needs are nitrogen and phosphate as well as potash. Sulphur is sometimes a deficient element in Northern Ontario and throughout the West. An application of sulphate of ammonia at 5 lb. per 1,000 square feet at least once a year will correct this.

Limestone. Unless a soil is strongly acid, limestone will not be needed. Acidity is measured in terms of pH; pH 7.0 is neutral. Numbers over 7 are alkaline, and the higher the number the more alkaline it is. Numbers below 7 are acid; pH 5.5 is on the border of strong acidity. Any soil below 5.5 may need lime. Use a good grade of agricultural limestone and spread at the rate of 200 lb. per 1,000 square feet. To be effective, it should really be worked

into the soil before seeding. Top-dressed lime will take years before it gets down 1-2 inches, but it eventually will. Grasses favour soils a little on the acid side and in most cases liming is not a big problem. A soil test is the only way of determining the acidity of the soil.

POOR GRASS IN SHADE

Most of the grasses don't like dense shade. In such locations trim the trees up as far as practical to let in more light and choose grasses which will take shade. For shady areas, try a mixture of 75 per cent red fescue and 25 per cent Kentucky blue grass. Rate of seeding would be about 4-5 lb. per 1,000 square feet.

Roses and Soil Fertility

R. W. Oliver

*Research Branch, Canada Department of Agriculture, Ottawa,
Canada*

TWENTY-FIVE years ago following fairly standard practice, I set down on paper recommendations for feeding roses. Many people have followed them with success, and if followed in years to come I have no doubt that they will continue to produce roses satisfactorily. They were as follows:

- (1) Bone meal applied in fall at 5 lb. per 100 square feet of bed.
- (2) Rotted manure placed in the hollows in the bed after plants had been mounded in the fall for winter protection. This is worked into the earth when mounds are pulled away in the spring.
- (3) Ammonium sulphate in early spring at 1 lb. per 100 square feet.
- (4) 4-8-10 fertilizer at 2 lb. per 100 square feet applied in early May, June and July.
- (5) Mulch of peat moss applied in early July.

If the reader is only seeking a feeding recommendation this will suffice, except that rotted leaves will probably have to be used in place of manure and 5-10-10 fertilizer substituted for 4-8-10 which is no longer available.

There is no serious need of apology for the programme but twenty-five years' more experience with roses has made the problems of soil management seem much more complicated. The assumption that any one treatment will work under all conditions or that it is the best treatment for any one garden, is pure conjecture rather than something to be dogmatic about.

Those who care to read further in quest of more explanatory information, will of course find much repetition of things that have been the subject of articles for many years. There are, of course, new angles expressed from time to time.

Roses are more demanding than many plants; humans demand more from them. Roses are particular about the balance between air and moisture in the soil; less tolerant than many plants, of excesses or deficiencies in the various chemical elements. This is probably due to the fact that their root system has little feeding fibre compared to the vigorous top growth and flower production we expect. If we are using *R. canina* as an understock because of its increased hardiness influence, the condition is emphasized. We find that roses on *R. multiflora* are much more tolerant of adverse conditions in the soil, because the roots have more fibre.

Texture of the soil is more important than with many plants, in order to promote the development of root fibre. Roots must have sufficient moisture to maintain a turgid condition. Root tips and feeding hairs must have oxygen to promote active growth. Too much free moisture or too tightly packed soil can suffocate roots: too open a soil can allow roots to dry out so that feeding hairs die. Roses cannot afford to lose roots. They are not like Siberian iris or barberry bushes.

As all of us have read before, the physical texture of a soil is made up of small particles of sand, silt, clay and organic matter in various proportions. The first three, usually referred to as the mineral particles, have resulted from the breaking down of rocks by weathering. Sand is largely inert silica with particles varying from 2 to 0.02 mm. Silt is finer varying from 0.02 to 0.002 mm. while clay is still finer.

Organic matter has resulted from the breaking down of dead plant and animal tissues. It may be in various stages of decomposition and the particles may vary greatly in size and structure.

In best physical condition the soil particles are grouped together in porous granules or crumbs in which the particles are held together by somewhat adhesive substances known as colloids, largely resulting from humus which is formed through the decomposition of the organic matter.

The proportion in which the different particles exist and the granular state determines the physical condition of the soil and its capacity to hold air and moisture. Tightly packed mineral soils which have less than 15 per cent pore space cause suffocation of

roses and many other plants: open sandy soils or organic soils may have over 50 per cent pore space which causes drought conditions. Roses seem to prefer a soil that has a porosity rating about 30 per cent so long as there is good moisture content.

Coarse sands will naturally have large individual pores through which water can percolate freely. Clay soils have much finer individual pores so that the flow of moisture is not so free. Though the individual pores in sand are larger, the total pore space in an equal volume of clay—particularly if organic matter is present—is larger.

Free water in the pore spaces drains out of the soil and is not used by the roots. Indeed if it remains in the soil, the roots will be drowned for lack of oxygen. The moisture which is used by the plant roots and which carries nutrients into the plant in solution, is held as a thin film on the surface of each soil particle. There is therefore a greater amount of available moisture in a cubic foot of clay than in a similar quantity of sand.

Organic matter is very porous and holds its moisture as a sponge in a thin film on the surface of each fibre. It is therefore of great value in increasing both the air and moisture holding capacity of both sand and clay soil.

As well as these physical advantages, the presence of organic matter in the soil is of utmost importance to the chemical side of plant nutrition. It is the source from which ammonia, nitrates, and to a lesser extent other elements are released. Even of more importance, organic matter is the happy home of various groups of micro-organisms (lower forms of plant life such as actinomycetes, algae, bacteria, fungi, etc.) which obtain their food and energy from the organic matter and cause its decomposition in the process. The beneficial forms depend on the presence of air in the soil, some even obtain their carbon from the carbon dioxide in the air as do higher forms of plant life. Forms which will develop in conditions without air release excessive amounts of nitrates which are toxic to root growth.

As well as releasing nitrogen from the organic matter directly for the roots to use, the process of decomposition releases water, carbon dioxide and ammonia to form acids which work on the

mineral particles of the soil through basic transfer of ions to release phosphorus, potassium, calcium, manganese, iron, etc., in soluble form that the plant roots can absorb.

Also in the process a small part of the nitrogen produced, together with a larger portion of the non-nitrogenous material such as cellulose, helps to form the dark brown or black colloidal material called humus so valuable in maintaining proper physical texture. This humus is fairly stable. It breaks down slowly through oxidation but under proper cultural practice is replaced more rapidly than it disintegrates.

The presence of these micro-organisms in the soil is therefore necessary under garden conditions as they are responsible for the release of all new food materials of the plant except the carbon, oxygen and hydrogen it obtains from the air and moisture.

Where raw organic matter is added such as peat, straw or sawdust, little nitrogen is present compared to the amount of carbon. The nitrogen required by the micro-organisms will be taken from the soil. Unless available nitrogen is added the plants may be starved of nitrogen.

Peat applied in July without additional nitrogen may tend to slow down growth for this reason and help to avoid winter damage.

In sterile media such as sand, cinders and haydite used in green-houses when the cultural method known as hydroponics is practiced, mineral elements are all supplied in weak solution by artificial means.

After the mineral elements are taken into the plant in solution they are converted back into complex organic substances such as carbohydrates, proteins, etc., to form the living tissues of the plant as well as its stored food.

Nitrogen enters the plant largely in the form of nitrates and plays an important part in the formation of the green colouring matter of the leaves and stems. As this substance known as chlorophyll is largely responsible for the absorption of energy from sunlight to carry on the chemical changes in the plants raw food supply to convert it to starches, sugars, etc., this function is important. Nitrogen is also necessary to the formation of proteins throughout plant tissues.

Therefore if the nitrogen supply is inadequate there will be pale colour in the leaves and poor, thin growth. If the condition is severe, leaves will be smaller, with yellow and red and purple patches resulting in early defoliation.

If nitrogen is in excess, leaves will be large, very dark green in colour and the new growth will be soft. An excess of nitrates within the plant breaks down the proteins and the plant becomes more susceptible to winter injury and fungus diseases.

Apparently there is intimate relationship and some antagonism between nitrates and soluble phosphorus. While there is ample total phosphorus in most of our soils, it occurs in an insoluble form and is only released by the acids in the soil mentioned above. The soluble form may quickly be rendered insoluble again. The plant roots have to seize their opportunity.

Phosphorus is essential to the growth of roots and to the development of proteins within the plant, particularly the proteins in the reproductive tissues of flower and seed formation. Hence the recommendations to dig bone meal into the lower level of soil when planting roses. Most of the soil bacteria are in the upper layer. The soluble phosphorus released as a by-product of their activity is leached through the soil and much of it fixed in an insoluble form before it reaches the level of the roots. This too is one of the advantages of peat mulch. The roots are encouraged to stay near the surface.

Deficient phosphorus affects the building up of many of the same products as nitrogen. It may cause the red and purple blotches on the leaves. When one is sure that ample nitrogen has been supplied it is advisable to make sure that there is also ample phosphorus.

Potassium is also fickle. It is essential to the production of many things, but we have not yet discovered just how it operates or where it settles down. It is found in the sap within the conducting tissues and seems to play a big part in the intensity of colour and firmness of texture. Like some people it seems to be frightfully busy running around without settling down, but we can't get along without it. It is sometimes thought that its slight radio-activity may supply just the push that is needed in many reactions.

Slight deficiency tends to produce thin top growth with a

bluish tinge to the foliage. In more severe cases the edges of the leaves curl and burn taking on the appearance of ash. There is also a balanced relationship with nitrogen. Excessive nitrogen may produce low potash symptoms. Increased susceptibility to fungus disease occurs in either condition.

In clay soils there is ample potash sufficiently exchangeable under normal reactions to meet plant needs.

Calcium plays an important part in root growth and the strengthening of all leaf and stem tissue. Because of its alkalinity it is very active in the soil and if in excess, ties up the phosphorus and other mineral elements particularly iron so as to cause deficiencies. Lime induced chlorosis (cream-coloured foliage with green veins) is the great indication that too much lime is present in the soil causing a deficiency of iron. For good rose culture the pH of the soil should never be allowed to rise higher than 6.8 or fall below pH 6. For this reason lime is not recommended in any fertilizer programme for roses.

Magnesium is also important to plant growth. If lacking, pale areas develop between the veins of the leaf. These may become red spots which crack but the veins stay green.

This and other symptoms caused by deficiency of the minor elements such as boron, copper, manganese, molybdenum, etc., are seldom met with in garden rose culture where reasonable fertility is maintained.

Experimental work with greenhouse roses at Ottawa and various stations in the United States shows that optimum production is secured when the nutrient level of nitrogen is 30-50 ppm (parts per million) phosphorus 5-8 ppm and potash 40-50 ppm (Spurway test). Those of us who like that sort of thing, could carry out tests of our soil from month to month and use appropriate fertilizers to maintain these levels.

Assuming that a cubic foot of garden soil weighs 100 lb., the addition of one pound of actual nitrogen per 1,000 square feet would be the equivalent of approximately 20 ppm in the top six inches. The theory would be to add 2 lb. each of actual nitrogen and potash with $\frac{1}{4}$ lb. of phosphorus, disregarding any natural soil fertility. However, nothing is that simple in soil chemistry.

As pointed out, good soil has a perpetual motion of chemical reaction with an ebb and flow of release and fixation of the nutrient elements which the roots must seize as the opportunity is presented. Much of the fertilizer we add in soluble form is leached out or fixed in insoluble form; much we add as insoluble is released later.

Modern knowledge leads us to fertilize in either of two ways. The first, for emergency relief just as we use blood transfusion and intravenous feeding in humans, is to use small amounts of immediately available fertilizer every three weeks. Ra-pid-gro, Nachures, RX15 and Hytrus are all commercial examples. If you care to mix your own, the following liquid fertilizer could be used but should not be applied to the foliage.

3 lb. ammonium nitrate
3 lb. ammonium sulphate
16 lb. superphosphate
3 lb. muriate of potash
40 gals. of water.

This is the concentrated liquid. It should be diluted 1-15 by means of a 'hose-on' attachment.

The other method is to apply fertilizers such as Urea-form, bone meal, etc., from which the nutrient elements are released slowly over a long period. Usual recommendations are to apply an evenly balanced fertilizer such as a 7-7-7 or 10-10-10 at the rate of 1 lb. of actual nitrogen per 1,000 square feet of bed area in April, May, June and July. That would be 14 lb. of 7-7-7 or 10 lb. of 10-10-10 fertilizer each month. In either case fertilizer should have both nitrogen and phosphorus largely in slow-acting form, with enough inorganic material to give a quick boost.

Under garden conditions there is so much chemical interplay, and so many variable natural factors that fertilizer recommendations cannot be narrowly tied down to one programme. We can only apply a cross section of the elements the plants use, as we do in our own food, and hope for the best.



“ENGAGEMENT PARTY”
(Rose ‘Hector Deane’)

Arrangement by
Mrs. A. Gotobed, Hounslow

Reproduced by kind permission of the National Rose Society of Great Britain

Flower Arrangement

Ena Harkness, Hitchin, Herts.

THE Rose, the Queen of Flowers, goes back into time immemorial. Greek mythology tells us that the first rose sprang from the blood of Adonis, loved by Aphrodite. Even to-day a red rose signifies love and Heaven has been depicted as a Rose Garden. Together with the lily the rose is sacred to the Virgin Mary.

Praise of the rose has always been sung by artists, writers, musicians and lovers of beauty the world over. Small wonder then that we should grow it and use it to decorate our homes, with such enthusiasm. Such a truly lovely thing has all the attributes the flower arranger looks for; shapely buds, delicately folded petals in the half-grown flower, and rounded softness when fully blown. Why, then, is the flower not always displayed with complete beauty? Chiefly perhaps because the rose refuses to conform to line. Simplicity is surely the keynote to rose arrangement; always bear in mind that the rose will grow in water and spoil the whole picture if enough space is not left for each bloom to expand. Good, clean, fresh flowers, in containers worthy of them and in good proportions to each other, will give a pleasing picture without worrying too much about line and design as such.

However, one must know where one is going; it is as well to have some idea of the finished arrangement before beginning. First the flowers must be gathered and the early morning is the best time to do this. Here in England to cut roses on a soft, grey, misty morning is a pleasure that cannot be appreciated until it has been experienced. Take a pail of water into the garden and place each rose in it as soon as cut. Cut to a five leaflet leaf and flowers in the various stages of growth. Back in the house and in a place well out of drafts take each flower in turn and remove the lower leaves, thorns and a small piece of bark; place back in the water and store away in a very cool dark place for several hours. Tender

young foliage should have the stem ends dipped in boiling water for thirty seconds, and then be completely immersed in cold water for some hours. Even so these may flag after a time in the arrangement, but if removed and resoaked will regain all their crispness.

Flowers are usually better if they are arranged where they are to remain. Pedestal bowls and tall vases should be placed at or just below eye-level, and low containers higher. One lovely rose in a specimen glass can look beautiful placed on a low table, but if put on a high shelf one sees first the long glass and then, inadequately, the flower. The aim should be to see the roses and container as one complete picture. Dinner-table arrangements should be low enough not to impede the view of diners on opposite sides of the table; and should be of soft-coloured roses not too strongly scented. At the same time care should be taken that the arrangement is not so flat that it looks like a funeral wreath or memorial offering. Choose then the container with care and prepare it for receiving the flowers with a good firm stem-holder.

A needle-point holder in the base, covered with 2 inch wire crumpled up, is good. If snags of wire are cut and hooked over the rim of the container the stem holder will be doubly secure. Some snags of wire should also be left pointing upwards so that they can be used to encircle stems requiring to be held extra firmly. In a container where it is impossible to hook wire over the edge, two or three rubber suction discs, twisted into the wire and pressed firmly against the bottom of the vessel, will hold all secure. Water-retaining plastic foam is an excellent stem holder to use with valuable containers. Well soaked and wrapped in aluminium foil it can be moulded to the shape of the bowl or vase; and there will be no danger of scratches or water marks on the vessel. Flowers inserted in it will keep their position, even if the arrangement is carried about.

Wood, metal, glass and pottery are all suitable mediums for use with roses. It is shape, texture and colour which should be considered when an arrangement is contemplated. Red roses with holly, red candles and grapes on a pewter dish makes a festive picture for Christmas. Soft pink with old silver set on a dull satin

cloth for a dinner-table, or apricot shades on natural wood, white in a celodon green vase, all look lovely.

With the flowers, the container, and the position decided on, comes the pleasure of creating a charming picture. As a guide for any shape or line the longest stem should be one and a half times the height of the container; and in the case of a low bowl or dish one and a half times the width. This first stem is important as each other stem inserted should appear to join and spring from it at a slight angle. The first stem is in fact the only one which goes in quite straight. Small buds should be kept to the outside with slightly more open flowers towards the centre and lower down, placing the fullest flowers at the base. All the stems should be cut to different lengths with the shorter ones placed a little 'in' and the longer ones outwards. When more than one colour is used the deeper shades should be placed 'in' and at the lowest point, with the lighter tints towards the outside. Colours should not be blocked, or distinct from each other, but should run from light to dark through the arrangement. The hard rim of the container should be completely hidden; leaves of roses will often fall naturally to do this, and when they do not it is easy to cut a leaf with a short length of stem which can be inserted low down to hang gracefully over the edge. Careful trimming out of the foliage in the finished arrangement will insure a light uncluttered look. It is also advisable to prune floribunda and polyantha roses before using, cutting out one where two are touching.

The fine and delicate leaves of *cantabrigiensis*, *hugonis* and *willmotti* are sometimes used but it is doubtful if these are really suitable with hybrid tea roses. In the spring when these lovely shrubs are in bloom their long arching sprays can be used with very pleasing effect. If they are cared for in the manner already described they will last for several days, buds opening along the side as the older flowers fade. In the autumn when the hips are ripe and the foliage turning to its rich bronzy red, beautiful arrangements of fruit and foliage can be made without flowers.

The true rosarian shudders at the thought of putting other flowers with roses but the artist with flowers appreciates how roses will enhance a mixed arrangement; how a few fully open blooms,

used as a focal point, will complete the picture. Delphiniums, in several shades of blue, with the 'Queen Elizabeth' rose make an arresting massed arrangement, the long straight stems of this rose being particularly suitable and the colour, a clear, soft, even pink, combines well with blues. The lovely aztec, a spray of which will carry as many as five fully opened flowers, looks beautiful with the gladioli 'Silhouette' – a smoky pink with a deep-set eye the exact colour of aztec. 'McGredy's Yellow', that firm old favourite placed with the creamy feathery sprays of *Artemesia lactifolia* against a pale green wall, looks at once cool and heartwarming. The colour combinations that can be made are endless. In many cases, too, sweetly perfumed arrangements can be created. Roses can also be happily linked with ornaments – flowers and figures complementing each other. It is for the arranger to seek, find, and create her own pictures and only from practice can personal pleasure and satisfaction be found. If the flower arrangement is pleasing to the arranger, surely that is enough; from the pleasure of using roses will spring the desire to grow them. From the growing of roses comes the peace of mind, and the appreciation of beauty, which is the reward of gardeners everywhere.

Hybridizing Limitations

Roy E. Shepherd, Medina, Ohio

IT is somewhat difficult to realize that the Rose family (Rosaceae) contains approximately 100 widely distributed and diversified genera of trees, shrubs and herbs. It includes among others, and in addition to roses, such well known and dissimilar subjects as the Spirea, Blackberry, Raspberry, Plum, Peach, Apple and Strawberry. Modern botanists have attempted to place a few of these in other families or to establish entirely new ones, but their endeavours have not been universally accepted.

Plant breeders have also made numerous attempts to cross different genera of the family in the hope that distinct and valuable plants may result, but nothing of great importance has been produced. Improvement within a genus has been accomplished, however, by crossing one member with another and to these endeavours we must credit the great variety of apples, roses, etc., that we grow to-day.

There is considerable evidence to support the thought that Nature has created several inter-genera hybrids in the past, but man's accomplishments in this field have been comparatively few. Many persons believe that the nectarine, for example, resulted from a man-made cross of the peach and the plum, but it is more probable that it is a sport, or mutation, of the peach as nectarine seeds often produce peach trees and vice versa.

Although several members of the Rose family have genital organs of similar anatomy Nature has established certain laws that prevent their inter-breeding. Were it not for these restrictions we might have a conglomerated assortment of freak plant material with little practical or esthetic value. On the other hand, there are many combinations that could give us something worth while if they could be effected. Perhaps, however, we should be satisfied with the rose as we now enjoy it, and not anticipate an apple tree bearing rose blossoms or a rose bush on which the

blooms were followed by large luscious peaches. In all seriousness though there is a distinct possibility that science may eventually find means of effecting crosses that have failed previously, and inter-genera crosses within the Rosaceae group may become a reality. They should at least be interesting.

The writer has succeeded in budding a rose on to an apple branch and in crossing a rose with a member of the blackberry family, but the bud remained dormant and the seeds did not germinate. Dr. J. H. Nicolas, formerly Research Director for Jackson and Perkins, was more successful as he raised three seedlings of a cross between an apple and a rose. They were similar to the latter in general appearance but showed evidence of apple influence in the bark, foliage, and in the peculiarly coloured double apple-like blossoms. The latter, incidentally, were somewhat similar to those produced by Bechtels Crab but not as well formed or as large. The plants were barely remontant and after blooming they were inactive until fall when a second spurt took place. Further experience with Rose \times Apple and Rose \times Hawthorn crosses gave similar results and all proved to be sterile. They were therefore valueless for use as parents in further breeding along this line. Yes, Nature is quite insistent that man does not make 'hash' of her children, and perhaps we should be content with the beautiful supply of plant material she has given us. The ever-present challenge to create plants that are distinct from all others is so great, and intriguing, that man will probably continue to attempt crosses that now seem almost impossible; and who can say that he will not eventually succeed? Unfortunately plants have a tendency to transmit undesirable characteristics more readily than they do the desirable ones, and these hoped for inter-genera hybrids would probably produce blooms and fruits of inferior quality.

Insofar as roses themselves are concerned we still possess considerable unexplored possibilities within the genus. There are 333 somewhat distinct species of roses recorded in *Modern Roses V*, and but eight of these have contributed to the major types of garden roses. Surely the other 325 have some potential and this should undoubtedly be explored before we spend time on inter-genera exploration.

The American Rose Foundation

Dr. Cynthia Westcott, Glen Ridge, N.J.

THE American Rose Society has always been interested in rose research. Dues received from firms selling roses have been set aside for this purpose and contributions from individuals have been solicited. But because members receive personal benefit from the Society, in the form of a monthly magazine and the *Annual*, gifts to the Society are not deductible from income tax. Therefore, in 1952, the American Rose Foundation was set up as a separate entity whose sole purpose is to collect and disburse funds for research, all contributions being tax-deductible. By custom the president of the American Rose Society is chairman of the board of nine trustees of the Foundation. The two organizations share the same secretary, treasurer, and research committee but there is no legal affiliation.

The Foundation, in dispensing funds, tries to strike a balance between basic research on how and why things happen in roses, and applied research, such as evaluating new rose pesticides, that will be of practical help to gardeners and to the chemical formulators that serve them. Sometimes the two aims are combined into one project that provides a graduate student with an M.S. or a Ph.D. Sometimes two seemingly unrelated projects become one. Sometimes a sideline developing from the main project becomes more important than the original objective.

The first research fellowship granted by the Foundation was to W. R. Jenkins, graduate student at the University of Maryland, to investigate the inheritance of disease resistance in roses. Starting with Black Spot and using material from many different parts of the country he showed conclusively that the pathogen, *Diplocarpon rosae*, comprised at least nineteen different strains. This was certainly a blow to breeding programmes and explains why a rose

advertised to be resistant to Black Spot may not be so in another area. On receiving his degree, however, Dr. Jenkins turned to Nematology, leaving Black Spot complications to future workers.

The late Dr. James A. Gamble was convinced that all roses should have fragrance. He was not fooled by the prevalent idea that most modern roses lack fragrance and that all old roses were fragrant. Indeed he proved, by careful perusal of *Modern Roses IV*, that only 49 per cent of the roses introduced before 1900 had fragrance compared to 68 per cent of introductions since 1900. But that was not enough for Dr. Gamble! He wanted all roses to be fragrant and provided, through the American Rose Foundation, funds to be used by the U.S. Department of Agriculture to study the mode of inheritance of fragrance in roses so that this character could be incorporated in all breeding programmes. A bequest in Dr. Gamble's will has ensured the continuance of this study. Because inheritance in modern roses is very complex this meant initiating a long-term project on rose genetics in general. Since 1955 Dr. Robert N. Stewart has assembled at Beltsville, from world-wide sources, a very large collection of species and old-fashioned roses. These have been grown on their own roots, self-pollinated, and hybridized, then the seedling populations studied for variations, to see if similar characters in two species are due to the same gene. Hundreds of seedlings are now being evaluated by means of a check list of more than 100 items. These include habit of the bush, upright or prostrate, seasonal or repeat bloom, flowers single or double, small or large, type and shape of petals, position of styles, sepals, receptacles, fruits, fragrance frequent, slight or lacking, type of prickles on stem, number, position, shape, texture, margin, and colour of leaflets.

Fragrance is an elusive factor; it depends on climatic conditions and on the nose that is doing the smelling. Dr. Stewart has taken roses around for testing by various garden club audiences. He finds that about 80 per cent of the members agree with him that a rose has strong fragrance, some find only slight fragrance, and 5 to 10 per cent of rose lovers can detect no odour whatever. In Dr. Stewart's work self-pollinations of fragrant floribundas and hybrid teas have produced both fragrant and non-fragrant seed-

lings. Inheritance of fragrance is apparently not simple but determined by the interaction of a number of genes. Even if our research should develop a way to ensure fragrance there is no guarantee that commercial breeding programmes would then produce only fragrant roses. Nurserymen say that most of their plants are sold by colour pictures in catalogues and buyers pay little attention to listings of fragrance. Certainly if fragrance had been a prerequisite to introduction the world would never have had 'Peace'. Conversely, 'Pink Peace' has remarkable fragrance but many do not purchase it because the flower form is not of exhibition type and the pink colour sometimes has a tinge of magenta.

Along with other characters the seedlings are being evaluated for susceptibility to Black Spot, Mildew, thrips, and spider mites. As a plant doctor, I think this information is more important for nurserymen and home gardeners than solving the fragrance problem. Dr. John Palmer has developed very exact techniques for testing resistance of Dr. Stewart's seedlings, and some commercial varieties, to Black Spot. He has confirmed Dr. Jenkins' work on the many races of the fungus. He has also found that the age of the leaf and the time of year makes a difference, some roses that appear resistant early in the season becoming susceptible later. This probably explains why we sometimes find a lot of Black Spot in late August when our protective spraying programme seems to have been adequate up to that time. Because the fungus does not retain its virulence in culture, fresh material has been obtained every three weeks from various sections and single-spore isolations made. Leaflets from seventy different seedlings are inoculated simultaneously, each in duplicate. Two leaves, the first down on their respective stems to be full-size, are removed from each rose to be tested, washed, dried, upper surfaces rubbed to remove some of the cutin, and the leaflets divided between two large petri dishes, on absorbent cotton. One drop of a spore suspension is placed on each of four leaflets in each dish, but the fifth leaflet receives a drop of rain water without spores. The dishes are maintained at constant temperature, 71°F., and data taken on the tenth and the thirteenth day, using a microscope to determine infection if spots are not visible.

When I last visited Beltsville, in October, 1959, only one rose among the many so far tested had indicated resistance to all strains of the fungus tested. Next time someone says, 'Why don't they breed fragrant roses, resistant to Black Spot?' you will know that it is not for lack of trying. If the breeding of resistant varieties is proving so complicated, how about treating the soil with systemic chemicals instead of having to spray the foliage every week? This, too, has been tried. Dr. Palmer found, first on elms, then on roses, that captan could be translocated. Applied to the soil, it could be recovered from foliage. In his practical field tests, however, there was not too much visual difference between rose plots where the soil had received captan and untreated plots. More convincing field results have recently been described by Dr. H. R. Rosen of the University of Arkansas (in *Plant Disease Reporter* for November, 1959). Dr. Rosen applied 5 pounds of captan (50 per cent wettable powder) to 25 square feet of soil on 24 April and 24 May. The roses in such plots had very little Black Spot compared to those in untreated plots, and compared favourably with those receiving a weekly foliage spray. Captan had no effect on powdery Mildew as a ground treatment, but it is likewise ineffective for Mildew as a foliage spray.

Another approach to the Black Spot problem, under the auspices of the American Rose Foundation, is being made by Harold Kazmaier at the Battelle Institute, Columbus, Ohio. He is determining the relation of the auxin gradient between leaf and stem to the amount of defoliation. The answer will provide him with his doctor's thesis. Another rose-breeding programme is at Iowa State College where Dr. Griffith Buck is working for better rose understock: hardy varieties with a long winter dormant period, nearly thornless, resistant to Black Spot and other leaf spots and also to root nematodes.

Root-knot nematodes have always been a rose problem in southern states. In the past few years we have learned that many other nematodes harm plants and flourish in all climates, even in Canada. A plant pathologist told me recently that he thought half of the problems with woody shrubs came from nematodes. A survey of the relation of nematodes to roses (sponsored by the

American Rose Foundation with a grant to the University of Maryland) showed that every one of sixty-one samples of soil, taken from sickly roses in twenty-eight states, contained plant parasitic nematodes. Ronald Davis, research fellow working under Dr. W. R. Jenkins, obtained his master's degree in June with the thesis, 'Nematodes associated with roses and the root injury caused by *Meloidogyne hapla*, *Xiphinema diversicaudatum*, and *Helicotylenchus nannus*'. He found fourteen different kinds of nematodes presumably parasitic on roses but in these three genera he showed, by extensive cytological studies, the disastrous effect of nematodes feeding on root cells.

Mr. Davis' work was so good he was offered a position at Rutgers University, where Dr. Jenkins is now heading the Nematology division. Hence our immediate connection with the University of Maryland is terminated but the U.S. Department of Agriculture will carry on the next phase of the rose investigation, finding nematocides safe to use on rose plots before or after planting. Among the fields at Beltsville there is one, site of an abandoned nursery, that contains a large population of nematodes. Roses planted here for spray tests grew so poorly the tests were useless. Preliminary soil treatments made here by Mr. Davis this past season did not yield conclusive results, perhaps because the roses had already lost so many roots they could not respond to a reduction in nematode population, perhaps because the presence of an organic mulch affected the nematocidal effect of chemicals. This work is being enlarged and repeated in 1960, starting with healthy new rose bushes in the same locations.

The most recent Foundation fellowship is at Oregon State College under direction of Dr. I. W. Deep. The grant, for a minimum of three years, is given to: 1, conduct a fundamental study of development of powdery Mildew on roses; 2, to evaluate new fungicidal chemicals for control of Mildew, Rust and Black Spot on roses; 3, to seek systemic chemicals against Mildew, Rust and Black Spot; 4, to evaluate the relative susceptibility of rose varieties to the powdery Mildew fungus. Oregon is an excellent location for such a study. Powdery Mildew and Rust are prevalent there and the International Test Garden at Portland, with its

large number of varieties, offers a fine opportunity for records on susceptibility.

Along with such fundamental projects there has been continuous applied research to give immediate and practical help to amateur rose growers. For more than forty years Dr. L. M. Massey at Cornell University has evaluated rose fungicides, sometimes aided by a grant from the American Rose Society or the Foundation, sometimes not. Starting with his own combination of nine parts fine dusting sulphur to one part of arsenate of lead (called 'Massey Dust' by grateful users) and continuing through various coppers, ferbam, captan, dithane, maneb, glyodin and phaltan he has proved, over and over again, that Black Spot can be controlled, and that the choice of chemical is not so important as timing of applications. Many of these tests have been in co-operation with entomologists. The late Dr. W. E. Blauvelt showed that the disastrous rose midge could be eradicated with DDT; Dr. John Naegele is currently studying mites, especially those resistant to DDT and other chemicals.

Since the establishment of the Foundation annual grants have been made to the U.S. Department of Agriculture for the testing of rose insecticides, fungicides and miticides under the direction of Dr. Floyd F. Smith. There have been interesting sideline developments. Sulphur and copper were found to have a synergistic effect, the two together being more potent than either alone. A winter spray of lime sulphur had no effect on subsequent development of Black Spot but very low spring pruning, eliminating most of the over-wintering cane lesions, had a marked effect. There has been a definite correlation between control of Black Spot and mites and winter survival and also on the amount of bloom produced the following season. Removal of weeds reduces over-wintering mite populations. When I visited the spray plots last October those sprayed with phaltan and receiving aramite and tedion as a combination miticide seemed to be a bit taller and healthier than plots sprayed with other chemicals, but all treatments were reasonably effective compared to unsprayed bushes. There is, as yet, no reasonable spray programme for the flower thrips that migrate to roses daily from trees and grasses. They

stream through the air at any height. Their progress through greenhouses can be checked by screening ventilators with cloth dipped in dieldrin. For outdoor roses, we hope for a suitable systemic insecticide. Thimet is effective but too poisonous for amateur use. Others, less dangerous, are under test and may some day be marketed.

The annual grants by the Foundation are small, \$500 to \$3,000, and the co-operating institutions supply a great deal more in space, equipment, salaries for all except part-time students. Yet without such grants and the interest demonstrated in specific projects very little work of direct help to rosarians would be done. Our slogan is, 'Help the American Rose Foundation help you.'

Editor's Note: Dr. Westcott, plant pathologist and widely known as 'The Plant Doctor' is a Director-at-Large of The American Rose Society and Chairman of the Research Committee of the American Rose Foundation. Canadian rosarians, and all lovers of the rose, share in the benefits of the large amount of research work being done on behalf of the Foundation as outlined by Dr. Westcott in the foregoing article. Any friend of the rose may send a contribution to assist in this work to the Treasurer, Mr. M. E. Noggle, 149 W. Union Street, Circleville, Ohio, U.S.A.

The Wild Rose—The Floral Emblem of Alberta

P. D. McCalla, *Province of Alberta*

THE floral emblem of the Province of Alberta is the *Rosa acicularis*, popularly known as the Wild Rose. It is very common around the City of Edmonton and is widespread throughout the Province, usually on northern slopes and in denser shade and cool areas. This rose was chosen as the floral emblem of the Province by the Floral Emblem Act of 1930. It is interesting to re-read a part of an editorial appearing in the *Edmonton Journal* of 24 February 1930. 'While the rest of the country and the world for that matter is worrying about what is to be done with the unmarketable wheat crop of the prairies, the honourable members for Alberta are selecting a floral emblem for this Province.' It went on, 'and they are not selecting any kind of flower, just for the sake of having an official bloom. The wild rose appears to be the favourite, and this is evidence that Alberta's parliamentarians know their floriculture. The wild rose, what more beautiful flower could be chosen? Fragile and fragrant the wild rose makes inestimable appeal to the finer sensibilities of all the lovers of the beautiful; and it is so appropriate to a western Province. Have the prairies not been made to rejoice and bloom as the rose? Yes, this flower will typify the natural progress of a great province, and at the same time testify to its cultural development.'

The first interest in a floral emblem for the Province was in 1926. The Women's Institutes took a vote through the schools, and after a hot race between the tiger lily and the wild rose, the latter won by a good margin. As stated above, in 1930 the Floral Emblem Act was passed. The Act read as follows: 'The Flower known botanically as *R. acicularis* and popularly called the wild rose shall be adopted as and deemed to be the floral emblem of the Province of Alberta.'

The wild rose makes a strong appeal to people interested in native plants. The simplicity of the flower, pleasingness and delicacy of form, colour and texture and sweet fragrance, are attributes which symbolize the charm, grace and beauty of nature. The flowers of the native species are usually single and pink, and the plants are more particularly suited to the production of naturalistic effects in rather extensive developments such as characterize the parks and larger estates rather than to the planning of small gardens.

It is a low shrub, usually 3 to 5 feet. It is the tallest of the native species. The stems are covered with thorns. The leaflets are 5-7, usually 5, and dull and hairy on the upper surface. The flowers are single, pink in colour and blooms on laterals from two year or older wood. The flowering period is short, usually early in June but often later in the month if the season is delayed. The fruit is usually pear-shaped with a distinct neck and is a deep crimson colour.

The wild rose has beauty of line, colour and fragrance. It has to be handled with gloves, let anyone be so bold as to grasp it roughly and he will retire, utterly defeated. Like other Albertans it has become thoroughly rooted here, and on its own behalf it beautifies the summer landscape and its scarlet berries brighten the winter.

To-day an extensive rose-breeding programme is being carried out on the prairies by many of our most outstanding plant hybridizers. They are working to develop a rose with many of the attributes of the hybrid teas but hardy enough to stand the prairie winters. One of the parents in many of these trials is the native rose (*R. acicularis*). It is being used primarily to impart hardiness to the crosses, and while it is true the way is often long and hard, much progress has been made, and it will not be too long before the hopes of our rose breeders and all those who love this beautiful flower will be realized. Some selection work has also been done; the University of Alberta, for example, has an extremely attractive plant, double-flowering and more compact than the type. The school children and people of Alberta chose wisely thirty years ago when they named this plant the floral emblem of this foothills province.

These Delightful Miniatures!

Clifford T. Wilson, Willowdale, Ontario

THE spontaneous expressions of happiness with which the miniature roses are received at flower shows or in their nook in the garden; the welcome they receive as bouquet, or nosegay, or gift plant; the sparkle in the eye, and in the voice, of those who pause to admire them; the warm response of both child and adult, to their petite charm, all indicate the propriety of our titling line 'These Delightful Miniatures'. There is character and charm in these wee bushes, in their petite foliage, in the varied form and the glowing colour of their bloom, quite independent of their larger and better known relatives. A sympathetic understanding of their personalities will aid us in providing them a setting where they can charm us with their particular style of beauty.

Miniature roses are not just small replicas of the hybrid teas. Neither are they artificially dwarfed or stunted mutations of normal size roses. The miniature rose is a distinct tribe with a dominant blood strain which in spite of crossings with various other strains preserves certain distinct features. This miniature blood (*Rosa chinensis minima*) is what makes these roses different from all other roses, and if we are to truly and fairly appraise the miniature family we must do it in the light of these family characteristics, and the features we wish to preserve in their hybrid progeny.

R. chinensis minima is, as its name indicates, a species of small stature native to China. The species produces a small plant only 3 or 4 inches high with very fine fern-like (petite) foliage and a small $\frac{3}{4}$ inch single white bloom. It is extremely hardy, withstanding far more severe climatic changes than most of the larger roses. It is indeed fortunate that this hardiness is one of the desirable features that *chinensis minima* passes on to its children. Desirable as this hardiness may be, it is, however, but an added attraction provided by this dominant parent. It is the tiny bush,

the fern-like foliage, the wee flower that are the attractions which drew the attention of our hybridizers. Back in the early 1800's this rose was delighting the garden world, and while much of its history has been lost in a maze of folklore and legend at least one hybrid variety, the 'Pompon de Paris', seems to emerge from that period with a permanent spot in authoritative recording. During the last twenty-five years John de Vink and Pedro Dot have been devoting their time and skill in perpetuating these miniature characteristics in modern varieties.

These are the primary requisites of a miniature rose. A tiny bush—petite, fern-like foliage—wee flowers. We may add whatever we wish in form or colour, but when we lose any of these three primary factors we stray from the miniature. Some perversity of human nature, however, seems to drive us on to do just that, to stray from these primary requisites; to run with the crowd; to conform with current fashion; to breed away from these desired qualities; to find questionable value in larger and larger varieties until, with high bushes and crass foliage and large blossom, we approach the qualities of the floribunda—and we have lost our 'delightful miniatures'!

A tiny bush. Some strains of the species *chinensis minima* are only 3 to 4 inches high, others may reach a height of 12 to 15 inches. Our plant historians speak of miniature roses to be hidden under a coffee cup. A Toronto nurseryman in 1958 so described the variety 'Dwarfking' (whose tendency, unfortunately, is toward the larger varieties of miniatures and rather belies the description). A plant of 'Baby Masquerade' with 30-inch growth was reported in the 'Clearing House' (*Canadian Rose Society Annual* 1959). This does seem excessive even for this energetic variety. Ralph Moore, America's leading contributor to miniature hybridization has stated (*American Rose Society Annual* 1957): 'While it is possible to produce miniatures having one-half inch flowers on six-inch plants such as "Lemon Drop", these very tiny kinds are limited in their appeal and usefulness.' Many of his newer contributions seem to produce plants from 12 to 16 inches high, and some even tend to exceed these heights, thus approaching too closely the smaller polyanthas or floribundas. Plants from

6 to 12 inches in height most nearly approach the acme of desirability as viewed from our garden and visitor reactions. Some bushes reach to 15 inches, and still hold to miniature qualities of appearance. Beyond this the plants become coarse and more nearly resemble the baby polyantha group.

A surprising situation seems to have developed which may explain some reports of extraordinary growths and quite possibly also explain some dissatisfactions that have been expressed. The reports on 'Baby Masquerade' in the Clearing House indicate plants grown on both Canina and Multiflora rootstock. This seems a strange, unnecessary, or indeed quite unsatisfactory procedure. Self-rooted plants are extremely hardy and preserve their miniature characteristics which are so desirable. Why then graft to rootstock which is no more hardy and which will perhaps induce undesirable growth and coarser features?

Petite fern-like foliage. Petite foliage is a definite necessity to a good miniature. This petite, fern-like foliage is quite reminiscent of that of *R. hugonis*, although close comparison shows the leaflets of the miniature elliptical and tapering to a slim point rather than the blunter oval of *hugonis*. The entire compound leaf, usually of five or seven leaflets, will range from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches in length and the individual leaflet from $\frac{1}{2}$ inch or even less to $\frac{3}{4}$ inch in length and $\frac{1}{4}$ to $\frac{3}{8}$ inch in breadth. They are invariably quite finely serrated and these serrations along with the veins of the leaves are frequently tinged a reddish brown. Deviation of a hybrid variety from the miniature perfection is perhaps first noticeable in a coarsening of the foliage. This is quite evident in all of the better known varieties of yellows - 'Baby Gold Star', 'Rosina' and 'Bit o' Sunshine'. A good yellow with petite foliage is certainly much to be desired among the popular varieties.

Wee flowers. Here again our inherent desire to produce 'Bigger and Better' must be curbed. While undoubtedly the extremely small blossoms, of perhaps but a half-inch across, do not make much of a show and are inclined to open imperfectly, our principal danger lies at the other extreme in size. Perfection in miniature flowers seems to range between $\frac{1}{4}$ and $1\frac{3}{4}$ inches in diameter with the occasional individual bloom reaching $1\frac{1}{2}$ inches.

The 2-inch bloom is definitely too gross for a miniature. Miniature implies every part of the plant much reduced in size, yet in perfect proportion. Where flower and foliage are not sufficiently reduced in size the term 'dwarf' is perhaps more suitable, and these varieties better classified as dwarf polyanthas.

Ralph Moore also draws to our attention a miniature characteristic seldom thought of by the amateur grower. To quote once more, 'Miniatures have tiny leaves, are much branched, and make thick compact plants. The internodes (space between the leaves) are very short, thus placing the leaves close together.' One who studies his miniature plants will recognize at once this close spacing of the leaves and the compact branching as a distinctive quality inherent in the better varieties.

With this comprehensive understanding of the stature of our miniatures we can better realize their need for proper landscaping. To place one of these little pets amongst a bed of other roses is to miss most of its charm; to plant them in the foreground of a border, hidden among rampant edgings of alyssum and lobelia, is to lose them entirely. Even in the casual rockery care must be taken or they are concealed by thickets of foliage and massed blendings of colours.

These delightful miniatures give most profusely of their charm when they are entirely on their own. Fortunately almost any garden can provide them with the small area of privacy, necessary to them, to display this charm, for the average miniature rose plant requires only about a square foot of garden space. A tiny bed at a cottage door step or at the corner of a garage can contain a half dozen or more of these pets. If these beds are edged with bits of weathered limestone, or even small fieldstone carefully selected, it may add to the attractiveness of the setting. A hedge of miniatures along one side of (or all around) a patio could be a delightful thought. I know of a planting of perhaps a dozen or fifteen bushes beside a small lily pool which is indeed quite lovely. In the rock garden they can be charming if careful thought is given to placement and groupings. In the small rockery a single plant in a pocket carefully kept free of encroaching neighbour plants will make a pleasing specimen. In the larger

rockeries, pockets containing several plants of one variety or groupings of associated varieties offer interesting possibilities. The association of varieties by name holds an intriguing thought. 'Peter Pan' and 'Wendy' and 'Tinker Bell' really do belong together. Don't you think so? Then there could be a plant of 'Bo Peep' and 'Red Riding Hood' and 'Cinderella'. I've often imagined planting 'Humpty Dumpty' atop a rockery stone looking over his wall with perhaps 'Jack Horner' and 'Simple Simon' down there to watch his fall! These are but a few of the many possible name associations which could put added zest to our searching for miniature varieties. With miniature standards and climbers now available formal settings can be developed and made as extensive or as simple as needed to fit the garden. Just let your imagination work for a moment on the tremendous possibilities of a tiny formal garden perhaps 8 to 10 feet square complete with walls and pool and fountain, with tiled walks and alabaster statue! Perhaps I've sold myself a new project! Of course I like best of all the setting we have used. Here in our home garden we have a miniature rock garden devoted entirely to these delightful roses.

Our miniature rose rockery is roughly rectangular in shape, approximately 6 feet wide and 10 feet long. It was built on level ground but three sides are slightly raised to give a bit of elevation. We've used small pieces of limestone the largest of which will not occupy more than a square foot of space and most of them much less. In this tiny area we have fifty vigorous and completely happy plants. For a background along the wide upper side we have a low but widespread trellis, planned for the miniature climber 'Red Head' ordered for delivery last spring but unfortunately deleted from our order by the nursery. At one end, where a screen is needed to camouflage the nearby cold frame, we have the more usual fan type trellis (not quite 3 feet high) on which 'Pink Cameo' sports itself to our delight. A tiny path of mossy *Arenaria* diagonals through the central portion, and in this setting some thirty varieties of miniatures make merry and from early June till late October deluge us with bloom.

It may be that the miniature roses are not for everyone. It may be their miniature charm and grace is lost to some. If,

however, you are one of the multitude who have found pleasure in their graceful charm please, oh please, give them the surroundings they need to promote their delightful personalities.

It was but a few years ago that you could have counted on the fingers of one hand the popularly known varieties of miniatures and still had a finger or two for spare. To-day one of our Canadian nurseries alone lists close to twenty varieties and without undue trouble from the catalogues arriving in our mail last winter I listed over fifty varieties which could be easily available. I have indeed found through various catalogues and other literature well over one hundred varieties mentioned. In our own planting we have thirty different kinds of these wee ones. How do they differ from each other? What other than those three essential characteristics do they have in common?

Our first thought perhaps is colour. We have whites, various values of pink, and of red. We have golden yellows and creams. We have the three colour change (yellow to pink to red) of 'Baby Masquerade'. We've even gone modern, with the drive toward blue, and have a mauve confection, 'Lilac Time'. The whites often show evidence of either pink or cream, and in the cool of spring and late autumn 'Cinderella', 'Pixie' and 'Frosty' are oft times definitely pink, and even more than usually attractive in this false colouring. 'For You' (Para Ti) and 'Polka Dot' favour the yellow and all season show a bit of cream. There is the deep rich red of 'Dwarfking' and the bright red of 'Robin' which ages to a lovely soft pink. There are the reds with white eyes. 'Tom Thumb' (the oldest and still one of the best) and 'Little Buckaroo' (who is too big for his breeches) and 'Westmount' (which may turn out to be a modified 'Little Buckaroo'). There are lovely soft pinks like 'Perla de Montserrat' and 'Tinker Bell', and beautiful peach shadings in the lovely 'Candleflame'.

In stature our bushes vary from low and spreading to upright, compact to sprawling, and unfortunately sometimes to unwanted height. 'Pixie' and 'Tom Thumb', two of the oldest varieties, neatly fit into the low and spreading category. 'Cinderella' is a bit taller and even more wide-spreading than these. 'Robin', while compact and not tall, is most definitely upright. 'Perla de Alcanada',

while more bushy than 'Robin', is also noticeably erect in its growth habits. 'Baby Masquerade' is upright and inclined to reach a bit. 'Tinker Bell' likes to sprawl in quite unfairy-like fashion, and 'Sweet Fairy', while quite bushy in the open, will climb surprisingly if planted against a wall or beside a stone in the rockery. The smallest in stature in our planting are 'Pixie' and 'Cutie' and 'Red Imp'. The other extreme is found in 'Baby Gold Star', 'Rosina' and 'Little Buckaroo'.

The varied flower forms are interesting. There are simple cup-shaped semi-double blooms like 'Tom Thumb'. There are many-petalled extremely double ones like 'Frosty' that reflex their petals almost as completely as a 'Pompon Dahlia'. There are blossoms of beautiful exhibition form like 'Perla de Montserrat' and 'Polka Dot' (which has been described as a miniature Kaiserin Augusta Victoria). Most striking among the newer ones are the tightly quilled petals of the Aster flowered group. 'White Aster' and 'Robin' and 'Lilac Time' are examples. In a class by itself is the exquisite five-petal single blossom of 'Candleflame'. Some, like 'Midget', grow in polyantha-like clusters and others such as 'For You' and 'Polka Dot' seem always to produce specimen blooms.

Some of these wee flowers seem especially adapted to the arranger's art, and Mrs. Wilson finds this special merit in 'Perla de Montserrat' and 'Midget' and 'Cinderella', and even more especially in the graceful laterals of climbing 'Pink Cameo'. Each flower has its own especial charm, each bush its own distinctive way. To some of them, even above and beyond all these other gifts of loveliness, has been added that of fragrance.

These, then, are the miniatures, the wee ones, the elfin roses that would brighten your garden and your living; that would bring a smile to your face and happiness to your thinking. These are the petite bushes that make friends of little children and bring dreams to old grandfathers. These are the tiny roses, too small perhaps for some to see, but which to others are jewels, or perhaps just glittering dewdrops, in the garden. These are the 'Delightful Miniatures'.

Rose Growing in the Atlantic Provinces

G. C. Warren, Charlottetown, P.E.I.

THE fact that this article is entitled 'Rose Growing in the Atlantic Provinces' does not signify that rose growing in this area is necessarily different from most other parts of Canada. In fact, if the truth were known, we probably have almost as wide a variety of conditions within our own borders as exist elsewhere in the Dominion. Many Canadians, I am sure, look on our four provinces, insofar as weather conditions are concerned, as a cross between Siberia and the North Pole, and I admit we do have cold spells that make us button up our overcoats and put on our woollen underwear. However, if you take the time to glance over the following table, you may be in for a surprise.

FORTY-YEAR AVERAGE WEATHER CONDITIONS THROUGHOUT CANADA

<i>Station</i>	<i>Mean Tempera- ture</i>	<i>Total Sunshine</i>	<i>Mean Precipita- tion</i>	<i>Frost- Free Days</i>
Kentville, N.S.	43.3	1764.9	40.81	128
Charlottetown, P.E.I.	42.7	1863.4	42.87	153
Ottawa, Ontario	41.7	2010.4	34.52	143
Harrow, Ontario	49.2	2012.4	26.54	156
Morden, Man.	37.9	2177.4	20.05	124
Agassiz, B.C.	50.0	1408.1	62.26	208

Aside from Agassiz, British Columbia, our mean daily temperature compares favourably with the rest of Canada and our hours of sunshine, while slightly lower than Central Canada, are much higher than those of British Columbia. Central Canada is also drier than the coastal provinces and our frost-free days, aside from British Columbia, are equal to the best. This information may be somewhat startling to our friends outside the charmed circle, but figures do not lie.

The proof of the pudding, of course, is in the eating, and you may wonder about such things as wintering, colour of blooms, floriferousness, and all the other items that go into making flower production a success. Quite frankly, despite the favourable picture just presented, I believe our over-wintering problems are a little more acute than in most other areas, and certainly more difficult than those in Central Canada and the West Coast. Generally speaking, however, our losses do not exceed 10 per cent and this figure may even be a bit high. The winter of 1958-9, of course, was an exception, but I understand conditions were much the same throughout the whole of Canada. While winter hardiness may be placed on the debit side, bloom quality and floriferousness are definitely on the credit side of the ledger. When it comes to flowering seasons we also have something to talk about, since our bloom periods are not so sharply divided as those in the drier regions.

And what about diseases and insects? I would be telling a deliberate untruth if I stated these were negligible, because our climate is conducive to the growth of diseases and pests, just as it is for humans – and the former flourish in abundance. Mildew, in particular, is difficult to hold in check and our climbers are a special attraction for this disease. The newer fungicides and insecticides, however, take care of these effectively and if Mildew gets out of hand, as it sometimes does, many resort to the use of lime sulphur. The latter material is, of course, rather dangerous to use on roses, but at one to one and one-half tablespoonfuls to a gallon of water, it rarely does any damage.

When it comes to varieties and types, as grown in this area, comparisons are difficult to make, but it may be said that the hybrid teas exceed all others in popularity. Despite their well-entrenched position, however, they are being hard pressed by the newer floribundas. While in the minority by a large margin, the hybrid perpetuals are by far the hardiest and should definitely be more widely planted. There is an old saying that runs as follows: 'Tis the part of a wise man to keep himself today for tomorrow and not venture all his eggs in one basket', and the gardener who plants all hybrid teas and neglects the hybrid

perpetuals is not looking forward with the proper perspective. In between the hybrid teas and hybrid perpetuals are the floribundas, and with the improvements being made in bloom size, hardiness and colour, I expect them to reach great heights in the future. The grandifloras are not yet widely planted, but as the number of varieties increase, so will their popularity. A mild interest is also being shown in shrub roses and the newer varieties are certainly worthy of attention. It is to be hoped that the shrub roses, which are generally hardier than the common garden roses, will eventually find a place in relation to their value. Many new shrub varieties are now being introduced from Europe and the hardiest of these should be widely tested.

Not much is known of the history of rose-growing in the Atlantic Provinces, although I am sure, if one had the time, a great deal of interesting information could be uncovered. Undoubtedly the early French and English settlers brought with them their favourites from home and, perchance, may have found a few already in existence. R. W. Oliver's bulletin, 'Outdoor Roses in Canada', it may be noted, lists a group of roses grown in the Eakins garden in Yarmouth, Nova Scotia, during the gay nineties. Surprisingly enough the varieties contained in this planting are still popular in their class, and include such favourites as Alfred Colomb, American Beauty, Duke of Edinburgh, General Jacqueminot, Mrs. John Laing, John Hopper, Paul Neyron and Ulrich Brunner. Practically all are hybrid perpetuals, I admit, but then hybrid teas were just coming into their own.

Perhaps you have noticed that, whenever a number of rose growers get together, the conversation almost invariably turns to winter protection; and this, I assure you, is a very live subject in these provinces by the sea. All the usual methods of winter covering are, of course, in vogue, but I should imagine that at least 90 per cent of the rose enthusiasts consider mounding with soil to be the best protection. Last winter, however, even this method failed in its objective and even the hybrid perpetuals – some of them at least forty years planted – succumbed with the rest. When most gardeners were bemoaning their fate and shaking out their purses to see if a few additional pennies could be found for

replacements, Mr. H. P. Connor, in Halifax, rather smugly announced that he had not only wintered his roses successfully the past winter, but had lost only one plant out of sixty in the last twelve years. You may be sure that this news aroused a great deal of interest, and many gardeners were anxious to find out what protection was used. And here, in Mr. Connor's own words, is how it's done: 'A great many people have lost a large percentage of their hybrid tea roses during the past winter which turned out to be an unusually severe one. Since I have had good success with a practice I have been following for the past twelve years, I am passing it on for the information of other gardeners in this area. During the time stated, I have lost only one hybrid tea rose in my comparatively small bed of sixty roses and this is almost entirely due, I believe, to my practice of placing a few handfuls of rock-wool insulation around the bushes at ground level. If the plant being covered is of a large type, such as "Peace", one or two additional handfuls are used. I then simply mound the bushes up with soil at the usual level of about eight inches. As a rule, I do not even bother to cover the plants over with spruce boughs, although possibly this might add a little extra protection. The soil and insulating material is removed about the end of April, and the rockwool is saved to be used again the following year. The principle back of this idea is that the insulation allows the bushes to get cold slowly as winter sets in and, conversely, to warm up slowly again in the spring.'

Since Mr. Connor's announcement last spring, many letters have been received asking for information on this method of winter protection, and I am told that many growers used rock-wool insulation in their programme the past fall.

While the future's lips are ever sealed, it is not difficult to prophesy a glowing future for rose growing in the four Atlantic provinces. Rose production is expanding year by year, and new growers are being added rapidly to the fold. Even winters such as we experienced in 1958-9 are apparently no deterrent to the initiated and such enthusiasm augurs well for the years to come. And I warn you - gardeners in the other sections of Canada - look to your laurels, for a militant band of rose growers is on your trail.

Let it Snow

Milton Cadsby, Editor 'The Rose Bulletin'

IN May 1959 it was apparent that severe winter damage had been suffered by roses, and other plants, in many parts of Canada and the Northern United States. A questionnaire on the damage suffered during the Winter 1958-9 was sent out to the members of The Canadian Rose Society. The reports from 150 members to the Editor of *The Rose Bulletin* forms the basis of this survey.

The cumulative information thus acquired has probably raised more questions than it has answered. Winter protection, so important in Canada, is a very controversial subject probably due to the innumerable factors which must be taken into consideration.

Freezing temperatures withdraw from the plant water contained within the plant cells. The more success a plant has in retaining its water against frost extraction, the greater will be its ability to resist injury. The plant contains two types of water; water that will not freeze even during sub-zero temperatures, and which in fact has all the characteristics of a solid, and none of those of a liquid, and known as bound water – and water that is as easily frozen as tap water and known as free water. Those plants that have a high percentage of free water in proportion to bound water are usually less hardy than those with a smaller ratio between the two. In other words the more mature the wood the more resistance a plant should have to winter damage.

Matured plants will not be affected by gradual temperature changes but are seriously affected by sharp fluctuations. Plant cells are killed by the freezing of ice crystals within the cell wall. A sharp drop in temperature freezes the free water within the cell instead of starting its extraction by ice crystals forming in the intercellular spaces, frequently splitting the canes. This theory of cell damage is borne out by those members who planted in the fall of 1958, and had but little damage. The new plants were dormant and as long as they were not planted too early in the

fall, and protected by hilling, remained dormant and escaped damage.

A good blanket of snow reduces the extreme fluctuations of winter temperatures and without it we must substitute coverings that are free from waterlogging, and yet have the insulating qualities required to retain the heat in the soil, and reduce the damaging effect of sharp temperature change. Hilling with soil is the best and most generally used protection, but it is only a substitute for the fine insulating qualities of snow. If it were possible to rely on having a good blanket of snow we would be better off without hilling, as the sun hitting the slopes of the hills, in periods of thaw, causes the snow to melt.

Members reported abnormal winter damage in Alberta, Saskatchewan, some parts of Ontario, particularly in the Toronto area, and throughout the maritime provinces. Manitoba, Northern Ontario and Quebec reported no abnormal winter damage. Freezing temperatures covered all the areas but what accounted for the difference? We may conclude that up to a certain point constant cold itself will not cause serious plant damage. Most plants had some soft growth when winter struck and the vast majority of the members hilled their roses, but the difference lay in the depth of snow received – the perfect winter protection is a heavy blanket of snow that remains all winter. Those parts of Canada having the least damage had a good covering of snow all winter.

Do the cells of any particular variety have a greater resistance to frost damage? Not according to our survey. Two varieties of hybrid teas, namely, 'Peace' and 'Crimson Glory', were reported by about one-third of the members as being resistant – a testimony to their vigorous constitution. However, many members reported 'Peace' as being very susceptible to winter damage and 'Crimson Glory' was not given any award for hardiness.

Little difference was reported in other varieties of hybrid tea roses, and I feel we may conclude that no variety is particularly resistant to winter damage, but recognize that a robust plant, well hardened and planted in a reasonably favourable location, will have the best chance of escaping serious winter damage. The

strong growth of 'Peace' and 'Crimson Glory' would account for the many votes they received as the hardiest hybrid tea roses. The vigorous growth of these same varieties continuing into the late fall, and then being suddenly hit by a sharp frost, would account for the many members reporting them as being amongst the varieties hardest hit.

We recognize that there are a few extremely tender varieties, and certain types such as the tea roses that cannot be grown in colder climates, but there is no assurance that a selection of hybrid tea roses can be made that would be hardy enough to withstand the winter frost, without protection. The efforts of certain hybridizers, notably the late Walter Brownell, in the search for hardier types are to be commended, but in my humble opinion we are still in the very early stages of research.

Some of our members report their belief that red roses are the hardiest and the whites or yellows the most tender. This does not seem to be borne out by researchers, and possibly their conclusions are more a matter of coincidence than scientific fact.

The floribunda roses appear to be hardier than the hybrid tea varieties, but none of this species can claim superior resisting qualities. The new grandiflora roses are not as yet as widely grown as the older species. There are but a few varieties but reports would not indicate that they are more hardy than their parents, the hybrid tea and the floribunda. Shrub roses show almost complete hardiness. Climbing and pillar roses are tender, even in those areas reporting no damage to other varieties, and we think the reason is obvious. Even in those areas blessed with a fine blanket of snow this protection was not deep enough to protect the climbing varieties, and they suffered damage above the snow line. If these roses can be removed from the trellis, or the trellis hinged in such a manner that it can be placed horizontally on the ground, and then covered with earth, they can be protected equally as well as the dwarf varieties. However, the stiff canes of most varieties prevent this method being used, and the task of protecting the canes while they are erect is a difficult one.

It will be of interest to many of our members to note that with few exceptions winter-kill was more severe where metal collars

were used in hilling up, regardless of the material placed inside of them. I have used cylinders made of heavy building paper quite successfully, and know of others that have had success with chicken wire. It would seem that the metal itself has a damaging effect.

It should be remembered, in considering the problems of winter protection, that we are protecting the virility of the plant as well as its physical form. A rose barely clinging to life due to winter damage will never become a satisfactory plant.

I believe that most of us have always thought that depth of planting had a bearing on winter hardiness, recommending 1-3 inches according to the severity of climate. The analysis has revealed no greater loss in those bushes planted with the bud at the surface; some authorities consider the bud to be the hardest part of the plant.

We hope that research will develop a method by which the home gardener can induce dormancy more effectively than by withholding water and fertilizer, the methods presently used. Perhaps in the near future we will, as autumn's chilly winds approach, be able to cut the last blooms of summer and spray the bush with a magic elixir which will speedily produce the required dormancy. From another spray a blanket of snow-like property will cover the entire rose garden.

Location of the rose bed is no doubt a factor to be considered. It should be remembered when setting up a rose garden that cold air flows down grade, as does water, and builds up at the lowest level. It can be dammed up or diverted. When air circulates there is less chance of injury than when cold air is bottled up by a dense hedge or close fence. It is, of course, important that the rose bed receive sun for at least half the day.

Frost damage of early spring growth is another problem we have to guard against. It will be found that certain varieties break their dormancy earlier and easier than others and these are the ones most likely to suffer damage in the spring. We should therefore be careful in the use of quick-acting fertilizer very early in the spring.

The reports did not indicate which understock was found to be

hardest, so far as survival of the plant grafted upon it is concerned. *Rosa canina* received more support than *R. multiflora* but not sufficient to form any definite conclusion. The Shafter stock (Dr. Huey) used in southern-grown American plants was felt by experienced growers to be decidedly tender, and this may account for the unsatisfactory experience some of our members have had with southern-grown plants. When ordering American-grown plants it would be advisable to order them on multiflora stock.

When all seems to have failed and your 'beloveds' appear quite dead in the spring, what can I say? Leave them alone! We can't tell if a plant is alive by appearance, even when winter-killed to the bud. Last spring I saw plants commence growing in Toronto as late as 30 July. It is true that some will be crippled for at least one season and others will perform satisfactorily; however, if a cripple does not regain its vigour by the second season it should be discarded. I am sure numerous roses were pulled out too soon last spring.

These many factors have made winter protection a challenging problem for rosarians. Why not apply some of these theories to your garden?

The Romance of the Floribundas

J. H. Wilding

HENRI GUILLOT raised the first hybrid tea rose, 'La France', in 1867. Contemporary writers, for example, Dean Hole and the Rev. A. Foster-Meliar, turned to it a short-sighted if not a blind eye. There is nothing unusual in lack of foresight. Moreover the French hybridists, who were prominent at the time, failed to follow up the pioneer work of their countryman by crossing more of the hybrid perpetuals with the tea roses. It was the younger British raisers who first appreciated the true worth of the hybrid tea rose. The same sort of thing happened to the hybrid polyanthas which were in time to evolve into the floribundas.

The floribunda rose is a cluster rose, but cluster roses are no innovation. The evolution of the hybrid tea can continue only so long as we improve health and vigour, introduce new variations in colour, and increase the number of flowers a tree may produce in any one year. Many of the wild roses of the world flower in clusters, and by the time the floribunda became popular we had taken one step back to two forward. There is romance beyond dreams in the wild roses, and by hybridization with these there lies ahead of the floribundas a vast ocean of possibilities for further evolution. They inhabit the northern hemisphere of the world in desert, mountain, woodland, and hedgerow; sea shore and moorland.

In 1924 there appeared in our gardens a Viking rose, 'Else Poulsen', the first hybrid polyantha, raised by Svend Poulsen of Denmark. Poulsen crossed the polyantha pompon 'Orleans Rose' with the hybrid tea 'Red Star' to raised 'Else Poulsen'. He sought to create a rose hardy enough to withstand the severe winters of Northern Europe. 'Else Poulsen' was the first of a line destined to threaten the supremacy of the hybrid tea. We still grow 'Else Poulsen' to-day for the charm of her early flowers, a delightful shade of pink. After June she becomes a victim of Mildew in our climate.



'VILIA'

Raised by H. Robinson, Hinckley

Reproduced by kind permission of the National Rose Society of Great Britain

Cluster roses we knew but not as bedding roses. The wichurianas rambed over our pergolas: 'Dorothy Perkins', 'Albertine' and many others. The nearest to a bedding rose was the polyantha pompon. Between 1913 and 1928 the Rev. J. H. Pemberton raised the group of roses we know as hybrid musks; clustered rosettes hanging in dense corymbs, and flowering in isolated showers till Christmas after a storm of bloom in June or July. The habit of flowering in pendulous rosettes they inherited from the musk rose, *R. moschata*. It was Farrer who described *R. rubus*, a variety of musk rose, as the 'Snowdrift' rose in his book *The Eaves of the World*.

In 1927 Pemberton released his hybrid musk 'Robin Hood', whose progeny were to play so great a part by interbreeding to fortify and beautify the hybrid polyantha. In later years, when blood had become truly fused, the hybrid polyantha became the floribunda.

In 1933 Wilhelm Kordes, of Sparrieshoop, Holstein, Germany, whom I in company with many others consider to be the greatest hybridist of all, introduced 'Eva', a red hybrid musk which he raised by crossing 'Robin Hood' with 'J. C. Thornton', a red hybrid tea. 'Eva' was to influence the breeding of both hybrid polyantha and hybrid tea.

Kordes crossed 'Eva' with 'Solarium', a red rambler, to raise 'Orange Triumph', an orange-red floribunda, which he introduced in 1938. The flowers are small, numerous and long lasting. It comes into flower rather later than the average floribunda. The growth is vigorous, tall, bushy and healthy. Francis Meilland, of Cap d'Antibes, France, took 'Orange Triumph' and fathered it to a seedling from 'Guinea' \times 'Wilhelm' producing 'Alain' in 1946. 'Alain' is a handsome crimson-scarlet floribunda with larger rosette-shaped blooms. Meilland back-crossed it with 'Orange Triumph' to deliver 'Moulin Rouge' and 'Concerto', both winners of the President's Trophy for the best new seedling rose of their years.

However, 'Eva' headed two stronger family trees for Kordes, one with 'Geheimrat Duisberg' ('Golden Rapture') which gave 'Pinocchio' in 1949. The other gave 'Baby Chateau' in 1936, 'Aroma' \times ('Eva' \times 'Ami Quinard').

The Americans hybridized 'Pinocchio' amongst whose offspring were 'Fashion', 'Vogue', 'Holiday', 'Wildfire' and 'Circus', and in the second generation 'Ma Perkins', 'Masquerade', 'Border Coral' and 'Ivory Fashion'. Amongst other things 'Pinocchio' transmitted the wild rose fragrance of some of the hybrid musks. Through 'Masquerade', 'Eva' was to blend hybrid musk blood with further wild rose blood of *R. setigera* and *R. foetida* bi-colour by way of 'Goldilocks'; but more of this later.

From 'Baby Chateau', Kordes and Matthias Tantau evolved the new orange-scarlet tints, and further scarlet crimsons, both unscorched by the sun and unblued by the rain. Above all 'Baby Chateau' transmitted the disease-resistant character of the hybrid musks. The notable children of 'Baby Chateau' are 'Independence', through which hybrid tea roses have been raised, to wit 'Karl Herbst', 'Grand Gala' and 'Perfecta' ('Karl Herbst' \times 'Spek's Yellow') and floribundas 'The People', 'Florence Mary Morse', 'Floradora' and a great many others. Amongst the grandchildren are 'Atombombe', 'Rudolph Timm', 'Siren', 'Sea of Fire' and 'Korona'.

The colour-break and the good health of these roses would be enough to register them in the hall of fame, but their growth and freedom of flowering are also commendable. To take one only; 'Korona' possesses colour dazzling as fire-glow. The blooms are weather-proof, and the growth is vigorous and resistant to disease.

About 1947 Kordes and Tantau began to tap the vast resources of the wild roses, seeking greater winter-hardiness for the roses of Northern Europe. Tantau mated 'Baby Chateau' with *R. microphylla* to raise 'Tantau's Triumph' and 'Käthe Duvigneau', which two roses interbred gave 'The People', a very full orange-scarlet floribunda awarded as N.R.S. Gold Medal in 1956.

A rose destined to mother a line of both yellow and bi-colour (red and yellow) floribunda was 'Goldilocks', raised in America by E. S. Boerner and introduced here in 1945. The parentage of 'Goldilocks' is unnamed seedling \times 'Doubloons'. Now two of the grandparents of 'Doubloons' (a yellow flowered climber) were wild roses—*R. setigera*, the Prairie Rose of the U.S.A. and *R. foetida* bi-colour, the so-called 'Austrian Copper'. Already

responsible for the brighter and two-colour hybrid teas, this was likewise to paint the floribunda.

'Goldilocks' mated with 'Holiday' gave birth to 'Masquerade', which therefore can trace its ancestry to the hybrid musk and the wild rose *R. setigera* and *R. foetida* bi-colour. E. S. Boerner raised 'Masquerade', which opens yellow and passes through shades of pink to red as the flower ages. In England E. B. Le Grice wed 'Goldilocks' as seed parent to 'Eleanor Le Grice' to raise 'Allgold', 'Copper Delight' and 'Golden Delight'.

In Germany, Kordes mated 'Masquerade' with 'Spek's Yellow' to mother 'Angela' and 'Faust', the first a magnificent bi-colour red and yellow, and 'Faust' the best yet of yellow floribundas. 'Angela', 'Masquerade', 'Enterprise', 'Circus', 'Salute', 'Shepherd's Delight' and the orange-scarlet progeny of 'Baby Chateau' such as 'Korona' exemplify in the floribundas what the Hon. V. Sackville-West, describing the multi-coloured hybrid teas, likened to 'a symphony of all the wild sunset colours, a sort of western sky after a stormy day'.

At the end of the nineteenth century Lord Penzance raised a race of summer flowering hybrids which became known as the Penzance Briars. He hybridized *R. rubiginosa*, the sweet briar, and produced amongst others 'Lucy Ashton', a white flowering shrub rose. 'Lucy Ashton' gave rise to *R. rubiginosa magnifica*. This was the rose which Kordes, still seeking hardiness, mated with 'Baby Chateau' to raise 'Florence Mary Morse', 'Obergartner Wiebicke' and 'Gertrude Westphal' in the first generation; 'Rudolph Timm', 'Sea of Fire' and 'Atombombe' in the second. The National Rose Society list these as floribundas (hybrid *rubiginosae*).

The significance was that Kordes used pollen from another strain of wild rose, the English sweet briar or the eglantine of Shakespeare and the Elizabethans.

*I know a bank where the wild thyme blows,
Where ox-lips, and the nodding violet grows;
Quite over-canopied with luscious woodbine,
With sweet musk-roses, and with eglantine.*

Possibly we have not yet seen the full effects of this union on

the floribundas. 'Florence Mary Morse' throws large clusters of red flowers with a sweet briar fragrance from very vigorous growth. 'Rudolph Timm' is vigorous, with pale pink flowers edged deep pink, and slightly fragrant. While 'Sea of Fire', red with a white eye, is moderately fragrant. Perhaps the English sweet briar may yet prove to be the rivulet from which will flow a stronger fragrance in the floribundas.

In 1950 Tantau introduced 'Floradora', an orange-scarlet floribunda, more successful in America than it is here. He crossed 'Baby Chateau' with *R. multibracteata*, which hailed from China, the home of so many wild roses. 'Floradora' became the father of another strain of floribundas. Lammerts in the U.S.A. pollinated 'Charlotte Armstrong' and 'Fandango' with 'Floradora' and raised 'Queen Elizabeth', 'Montezuma' and 'The Texan'. The National Rose Society label these as 'floribunda - hybrid tea type'. The Americans miscall them 'grandifloras', a term meaning large-flowered and also for other reasons unacceptable according to the International Rules of Horticulture Nomenclature.

The new family of floribundas is tall-growing, disease resistant and flowers from stems carrying either one rose or a cluster of roses. It has covered perhaps the last stage in the union of the floribunda with the hybrid tea. Two roses to a great part responsible were wild roses, *R. multibracteata* through 'Floradora' and *R. moschata* through 'Baby Chateau'. The Danish invader, the hybrid polyantha, into the province of the hybrid tea, originally English and French, came to rest like so many immigrants in the haven of the U.S.A., where hybridization was so complete that the 'floribunda - hybrid tea type' emerged.

Since 'Else Poulsen' first entered the lists the floribundas have taken the honours of champions equal to the hybrid teas. Meanwhile we are too dazzled by colour, and too confused by numbers to choose a favourite. We end up taking none, benumbed like a child in a toyshop, knowing that round the corner there are still more to come. I think if I retired now, and gave up my seat as an interested spectator, I would take with me 'Korona', 'Angela', 'Faust', 'Sarabande', 'Anna Wheatcroft' and 'Dickson's Flame'.

(By kind permission of The National Rose Society)

Let us consider the Earthworm

Orville E. Bowles, Editor

OF all nature's creatures, the lowly earthworm, better known as the fishworm due to its long association with the sport of fishing, but also known as angleworm, rainworm, dew-worm, night crawler and by many other names is probably the best known and most beneficial to man. The plough is one of the most ancient and valuable of man's inventions, but long before man existed the land was in fact regularly ploughed, and still continues to be ploughed, by earthworms, and it may be doubted that there are any other animals which have played so important a part in the history of the world as these lowly organized creatures.

There are but a few species and these are similar to each other. They are found in all humid parts of the world, some species having a very wide range. They inhabit the most isolated islands, abound in Iceland, and extend into the Antarctic regions.

The noted scientist and naturalist, the late Charles Darwin, spent an important part of his life in biological research and study of the earthworm, and his book *The Formation of Vegetable Mould Through the Action of Worms* is probably the most important work published on the subject. The findings of his research and study were published about eighty years ago, but very little has been added in the interval to his scientific knowledge.

As I have felt that a little more knowledge of these worms, and their great benefits to mankind, would be of interest to our members, I will try to present in this article a digest of this work together with other material that has been gathered.

Most of the land surface of the world is covered with a layer of vegetable mould, the basis of all vegetable growth more commonly called topsoil, and it varies in depth from a few inches to a few feet. This mould is blackish in colour, and regardless of

its location, differs very little in appearance, although it rests on various types of subsoil. The uniform fineness of the particles making up the mould is one of its chief characteristics due to having passed through the intestinal canals of worms many times. The leaves, grass and other vegetation that is drawn into the burrows as food, after being torn into the finest of threads and saturated with the intestinal secretions, are digested and mixed with soil, and go to help form the dark coloured rich humus that covers the earth.

Worms have played a more important role in the history of the world than may be generally realized. In almost all humid countries they exist in countless millions and for their size possess great muscular strength; they are able to move objects weighing sixty times their own weight. In many parts of England, as shown by tests over a period of time, more than ten tons per acre per annum of earth is brought to the surface so that the whole bed of vegetable mould would pass through their bodies every few years.

They are omnivorous. They consume large quantities of vegetation as food, and from the enormous quantities of earth swallowed they extract any digestible matter that it may contain, refusing leaves and vegetation that is obnoxious to their taste or too tough. The soil and vegetation taken in are thoroughly digested and mixed with a secretion of carbonate of lime injected into the alimentary canal which modifies the acidity of the excretion or casting, thus making it very beneficial to fibrous rooted plants and seedlings of all kinds. Worms prepare the ground in an excellent manner. They periodically expose the mould to the air and sift it so that no stones larger than the particles they swallow are left in it. They mingle the whole together like a gardener who prepares fine soil for his choice plants. In this state it is well fitted to retain moisture and to absorb all soluble substances.

Their burrows, which often penetrate the ground to a depth of 5 or 6 feet, materially aid in its absorption of water – and in its drainage. They allow air to penetrate deeply into the earth thus bringing oxygen to the roots of vegetation. While they have been found at depths of 7 and 8 feet they do not ordinarily burrow to

any great depth, except when the weather is very dry or intensely cold, confining themselves to the thin superficial layer of mould. They are generally found in much greater numbers in the kitchen garden or flower beds than in the grain fields, which is due to the fact that the gardens and beds usually have more humus and are continually worked. Where there is organic matter in process of decay worms will be found. Those gardeners who have composting beds will know of the countless numbers that gather when there is a digesting job to be done.

Worms are poorly provided with sense organs. They have no eyes and cannot be said to see, although they are sensitive to light, and can distinguish between day and night, thus escaping much of the danger from animals that prey on them. They are completely deaf but extremely sensitive to vibration, the whole body being sensitive to contact or touch. They have but a feeble sense of smell but are quite sensitive to temperature, and do not come out of their burrows during frosty weather.

The nerve and circulatory systems are fairly well developed, although they breathe by their skin as they do not possess any special respiratory organs. They are bi-sexual, the two sexes being united in the same body, but for reproduction two individuals pair together. Eggs which usually hatch single worms are laid about every twenty-one days. The life span of the earthworm is approximately fifteen years.

Another unique ability of the worm is the moistening and softening of leaves, and other food, with an alkaline pancreatic solution before they are taken into the mouth, and this predigestion is necessary since they have neither jaws or teeth. It is thought that the earthworm is the only creature having this ability of predigestion.

Without going too deeply into the detail of anatomy we will review briefly the main organs and their functions—we have already found two unique abilities of the worm, and there is still another of interest and very important. The body of a large worm consists of 100 to 200 almost cylindrical rings or segments, each furnished with minute bristles; and we have noted that the muscular system is well developed. They can crawl backward as

easily as forward and by the aid of their tails, which are usually left anchored in the mouth of their burrow, can retreat very quickly.

Since they have no means of mastication and their mouths consist of soft tissue, they consume by means of suction the leaves and other food that they have softened with the secretion of digestive fluid. The mouth, located well forward on the body, but not at the tip, is provided with a lip for seizing and holding food and other matter. Internally behind the mouth there is a strong pharynx which is pushed forward when the worm eats, and this compares with the protrudable trunk or proboscis of other annelida. The pharynx leads into the long gullet, and on each side of the gullet in the lower part are three pairs of large glands that secrete a surprisingly large amount of carbonate of lime. These calciferous glands are remarkable for nothing like them exists in any other animal. In most of the species the gullet enlarges into a crop in front of the gizzard.

This latter organ, a very important one in the function of the worm, is lined with a thick smooth membrane and is surrounded by powerful transverse muscles. Since worms possess no jaws or teeth of any kind the grinding of the food and intake of soil is effected by the squeezing and expanding of these powerful muscles, aided by minute pieces of stone which serve the purpose of millstones and grind very fine. The gizzard opens into the intestine which runs in a straight course to the vent at the posterior end of the body.

After swallowing considerable earth either in making its burrow or as food the worm comes to the surface, tail foremost, to empty its body. The ejected earth having been thoroughly mixed with the intestinal secretions, and thus rendered viscid, sets hard as it dries and is known as a casting. It must be noted that this excrement is usually deposited on the surface but if there are cavities underground to be filled, as when burrowing in newly cultivated ground, or old burrows to be filled, it will frequently be used for this purpose.

In time the earth's vegetation is buried beneath the accumulated castings of worms, and thus brought in a more or less

decayed state to within the reach of the roots of plants. They also draw an enormous amount of surface vegetation, consisting of leaves, grass and parts of plants, underground as food and also to line their burrows and chambers.

Their burrows are excavated by pushing the earth away on all sides with their powerful bodies, and by swallowing it. When a worm burrows to a depth of some feet in undisturbed compact ground it must form its passage by swallowing the earth for it is incredible that the earth could yield on all sides to the pressure of the pharynx when pushed forward within the body. It is believed that the worm swallows a much larger quantity of earth for the sake of extracting any nutritious matter, than for the making of burrows.

The burrows run down almost perpendicularly terminating in a little chamber and here they spend the winter. They are generally lined with a thin layer of fine dark-coloured earth voided by the worms so they must at first be made a little wider than their ultimate diameter. The lining thus formed becomes very compact and smooth and closely fits the worm's body. These burrows could be likened to tunnels lined with cement. The minute reflexed bristles which project in rows on all sides from the body thus have excellent points of support, and the burrow is rendered well adapted for rapid movement of the worm.

One of the strongest instincts of the earthworms is the closing of their burrows. It has been suggested that the mouths of the burrows are closed in order that the air within may be kept thoroughly humid, and of many reasons advanced for this instinct this would seem to be the most logical.

The mouths of the burrows are often lined with leaves to a depth of 4-5 inches, and this instinct is distinct from that of plugging them up. Worms often remain motionless for hours close to the mouth of their burrows apparently for warmth and the basket-like structure formed of leaves would keep their bodies from coming in contact with the cold earth. This habit of lying near the surface leads to their multitudinous destruction by birds. The bottom chambers of their burrows, used as winter quarters, are lined with very small stones and seeds to prevent their closely coiled bodies

from coming in contact with the surrounding cold soil, thus interfering with their respiration, which is effected by the skin alone.

During the day they remain in their burrows, except when pairing with an adjoining neighbour, when the greater part of their bodies are exposed for an hour or so in the early morning, and this practice may have given rise to the expression 'the early bird gets the worm'. Sick individuals, usually affected by the parasitic larvae of a fly, must be excepted as they wander about during the day and die on the surface. After a heavy rain followed by a dry spell of weather an astonishing number of dead worms may be seen lying on the ground. It is not likely that these worms drowned but rather were already sick and their death hastened by the flooded ground.

In the summer when the ground is dry they penetrate to a considerable depth, and cease to work as they do in the winter when the ground is frozen. Worms are nocturnal in their habits, and may be seen crawling about in great numbers – but usually with their tails still inserted in their burrows. By the expansion of this part of their bodies, and with the help of the short slightly reflexed bristles with which their bodies are armed, they hold so fast they can seldom be drawn from the burrow without being torn to pieces. The robins can vouch for this.

Musings in Glengariff

Mrs. J. J. Gallagher

FOREWORD. Several years ago, after much hesitation, I suggested to my good friend, Mrs. Gallagher, that the story of 'Glengariff', its establishment and subsequent development, including references to problems, disappointments and triumphs, would most appropriately grace the pages of the *Year Book* and that, of course, only she could perform that task. My hesitation was not due to any doubt as to her qualifications, but rather to a fear that modesty might induce understatement with consequent injustice to the subject. Mrs. Gallagher, also after initial hesitancy, agreed to undertake the assignment at some future date, and in the succeeding pages her charming pen-picture of 'Glengariff' appears.

This masterpiece exemplifies, perhaps more convincingly than her previous contributions, her rare descriptive powers, her appreciation of beauty in all its varied forms, and her love of the informality inherent in Nature. Aside from its artistic merit, Mrs. Gallagher has also incorporated in her article a wealth of cultural information which results in a well-balanced combination of the imaginative and the realistic.

It is obvious that Mrs. Gallagher's rose interest and rose knowledge are not confined to currently popular hybrid teas. It is her practice to explore amongst the species, the old and modern shrub types, and the plethora of floribundas which are being offered, as well as amongst the hybrid teas, in a never-ending search for the most suitable roses for given locations, thereby displaying the outstanding characteristics of all true rosarians.

I leave the reader now to twenty minutes of relaxation and sheer enjoyment.—A. J. WEBSTER.

ST. GABRIEL DE BRANDON is an old-time village in the heart of the Laurentides of Quebec. Long hills run down to an enchanting large lake. The lake has as many moods as the day has hours. In the morning sunshine it is a mirror, the hills exquisitely reflected in its calm depths. As the day wears on it sometimes resembles a bit of the ocean as wild breakers dash against the beach where small girls and boys shout with glee as they watch while 'the green curls over and the white falls under'. When the sun goes down behind the hills it becomes a limpid mass of gold and small craft riding home to their berths are bathed in an aura of glory.

The longest and steepest hill is Glengariff and the low stone wall that runs the length of the property offers many a resting spot to

weary hill climbers who always choose a space between bordering tall cedars which furnish an effective roadside screen. It is a pleasant surprise to discover spacious lawns tapering down to perennial beds practically in the forest, and to find roses growing nonchalantly here and there, up and down, wherever one looks.

There is continual bloom in the perennial beds. The early summer shows purple campanulas offsetting golden primrose, sweet william in varied hues, dainty English violets and, nearby, softly tinted felicia (hybrid musk) 'float their fragrance on the air', while blossom-laden dolga crab-apples add their pungent scent. Later on the shasta daisy, lythrum, giant delphiniums and huge phlox panicles transform the beds into veritable tropical luxuriance.

These are old beds of treasured memories. A new one, pear-shaped, has been designed, near the roadside stone wall. As this bed was intended for large, modern shrub roses, holes for them were dug deep and wide, three feet either way. Great shovelfuls of manure and compost were incorporated with topsoil, a trowel of bone meal and a handful of hardwood ashes added – and all left for the first winter to ameliorate into a luxuriant planting ground for shrub roses.

That this treatment worked to advantage was readily seen in the success of the first year's planting, notable for stout growth and excellent bloom. Kassel, sometimes considered a shrub, sometimes a climber, here grew as a shrub. Its chunky, tight buds, showing a gleam of orange-red, opened into double blooms which lasted for weeks. Not being too sure of the hardiness of Kassel, in October we laid it down on the ground (it had grown to $3\frac{1}{2}$ feet) and covered it completely with earth to the height of 12 inches.

Sparrieshoop, another selection in this bed, reminds one of 'Dainty Bess' – not as deeply pink, and lacking the beautiful red stamens – yet very pretty with its paler pink petals, a darker tone on the reverse. These came in clusters and kept on coming.

A number of 'Iceberg' (Kordes) had been planned for this bed. Unfortunately, so far, we have failed to obtain them. In the meantime 'Schneezwerg' and 'Stanwell Perpetual' (incidentally, we

remembered Gertrude Jekyll's advice to plant these rather straggly bushes in a group, about one foot apart) are making good stand-bys, and, in their less modern way, make more eye-catching and attractive the new red-orange variety floribundas, 'Coup de Foudre', 'Allotria', 'Olala' and 'Doris Norman'.

Quite close to this new bed there is a large boulder. We planted the 'Musk Danae' to sprawl over it, the small sweetheart type of bloom, being different with its yellow bud and creamy flower. It is very dainty and a soft contrast to the *H. Rugosa* 'Max Graf' directly below it. The latter has proved to be a fine ground cover in difficult spots. Its pink, single, sweet-scented blooms are a joy to behold for a good three to four weeks.

One realizes how steep is the slope in this lower set of Glengariff gardens as one climbs up to the house. No one uses the 'front' door, except maybe the local Curé on his pastoral visit, because the garden-door, really the kitchen entrance, is so much easier of access. On entering, most likely small grandchild Mamie (two and one half) will curtsy daintily and greet the visitor with a 'Good morning, nice trip?' and taking one's hand head for the big front verandahs. And while one is admiring a panoramic view of the lake and the hills beyond, the small one will come up with a profusely illustrated garden book from the library 'to look at the pictures'. Sad to confess, the day is all too short to enjoy the dual pleasure of rose books and experiments in the gardens.

There are two smaller rose beds at the rear of the house. Here, gloriously coloured in the early summer, roses bloom for a month to six weeks, with tall evergreens, maples and ash behind them throwing their shadows earlier and earlier as the season progresses. As a result, autumn bloom in this vicinity is less spectacular.

Roses in these beds include 'Pinocchio', 'Goldilocks', 'Sheila Baird', 'Mrs. Finch', 'Fashion', 'Circus', 'Grüss an Aachen', 'Masquerade', 'Alain'. All are rather low-growing polyanthas or floribundas, even at Glengariff, where most roses grow very tall. They make a nice foreground for several bushes, of 'Peace', 'Karl Herbst', tall 'Frensham' and 'Queen Elizabeth'.

Anyone doubting the hardiness of roses in this part of moderately northerly Quebec has but to look at the long bed on one side

of the tennis court at Glengariff. There, the 'Poulsens', 'Anne' 'Karen', 'Kirsten', and rose pink 'Else', the 'Priors', 'Betty' and 'Donald', have been showing off their beautiful colours and clean foliage for over ten years. 'Dainty Bess' is there, too, and while a single hybrid tea, she is perfectly at home among the tall floribundas. There are many other newer sorts in the front of this bed. Medium-tall 'Circus', 'Vogue', 'Dainty Maid', 'Masquerade', 'Border Queen', 'Amy Vanderbilt', 'Café'. The two last-named came really into their own in the tropical summer of 1959 with finebloom and rather attractive flowers. 'Café' has an exquisite scent.

On the opposite side of the tennis court, Mary, one of our daughters, has a very pretty rose garden in front of her home. Looking at its reflection in her picture windows it is puzzling to determine where the garden ends and the house begins. Chiefly moderns are planted here, 'Kordes Perfecta', mostly cream, with a glow of pink and striking pink edges. There are four bushes to assure having a few really good roses. 'Eve' (Gaujard) is a delightful low bush so far with the new coral-red shade, perfectly bewitching in bud. Also growing here are 'Kleopatra', a red and yellow bi-colour and 'White Swan', really white and fragrant. As an edging several plants of 'The Fairy' are used. They constitute a garden in themselves, always being in bloom. An ugly telephone pole is turned into a thing of beauty by having the Pillar rose, 'Phyllis Bide', wound around its base. This bush was supposedly tabu in our climate, but has grown and thrived for five years. It has good foliage and pretty semi-double blooms of apricot pink and gold. It is now twelve to thirteen feet high. This rose also is taken off the pillar, come fall, and covered with twelve to fifteen inches of earth. There are a few standards here, too. A pink 'Pinocchio' and a red 'Donald Prior' grow luxuriantly. Both are winter-protected by scooping out the earth perhaps a foot deep between them and the next row of roses; then the roots on one side are loosened and the standard, with its support, gently laid flat. A stick at each side of the trench is a good idea to mark its exact position. Quantities of earth are thrown over it and the surrounding ground. So covered each fall *they have proved hardy for a number of years.*

It is a continuous climb visiting the various gardens at Glengariff, and so it is pleasant to sit for a few moments under the trellis leading into the Little English Garden. It is an odd fact that various vines and climbers, even tall roses, have been tried time and again on this trellis, without success. So now it is just a pleasant place to relax without fear of small insects cuddling around one's neck. The English Garden, built up with field stone, much, much soil and plenty of leaf compost, has demonstrated how amicably roses get along with perennials. The garden background of larch, hemlock and cedar are typical of English gardens and they are here, but on a lower level so that their roots do not come into competition with the rose roots.

Aquilegia, foxglove, Russian lupins, lythrum, gorgeous giant delphiniums grow happily along with 'La Noblesse', 'Erfurt', 'Madame Pierre Oger', 'Scharlachglut', 'Double Red Gallica' and many others. There is a little flagstone path through this garden and beside it we have 'Papillon Rose', 'Sweet Repose', a number of low polyanthas, dianthus, English violets and sweet alyssum. Bees, butterflies and tiny humming birds find much to delight them here. Altogether it is an enchanting, an unusual garden.

Following the path leads one to the rose shrubbery. With the blooming of the species and the Old Fashioneds, Glengariff really becomes a fairyland. So many of these shrub roses grow tall and wide, and their arching branches, heavy with bloom, bend down to caress you as you pass, encircling you with their rich perfume.

Anything more beautiful than 'Nevada' (*moyesii*) in bloom is difficult to imagine. The buds are long-pointed, flesh-coloured, and open into the most enchanting, single, pure white roses, actually more than four inches across, quite flat, borne all along the canes. One drawback – it can Black Spot.

Another lovely white shrub in this location is 'Madame Plantier', veritably a huge snowball in looks, with sprigs of green showing through. Its rather flattish petals are quartered, and its green eye centre has a way of following one about the garden. 'Beauty of Dropmore' (Skinner, Manitoba) is a tall, compact bush. Its beautiful, creamy white roses in great abundance delight us for a month. There are many other interesting roses in this

shrubby in the early summer to delight the passer-by. 'Raub-ritter', half shrub and half vine, trails over the rockery in the built up part, and its pink, cup-like flowers are fragrant and long-lasting. Perhaps *R. macrantha* is the most loved, as it trails over the same stone wall. While in bloom it is a rose rendezvous for its constant admirers, its almond-pink blooms studded with stamens resembling jewels of old gold.

From the shrubbery one mounts to the major rose gardens. After trial and error beds elsewhere the main rose gardens eventually reached the highest section of the property. It is, regrettably, too far from the house, but we realize this site would please the most exacting rosarian; even old Dean Hole would agree we followed his advice: 'the Rosarium must be both exposed and sheltered, a place of sunshine and shade. The centre must be clear and open, around it a protecting screen.'

Just so is our hybrid tea garden designed. The setting is as Nature made it, really exquisite, with great hemlocks on three sides, far enough away so that none of their roots stray into the garden, and on the fourth side a grove of maple saplings.

The soil is a clay loam, now thoroughly impregnated with a yearly mulch of manure and peat moss. Each year to the new plantings is added a small trowel of bone meal; to the established roses a generous handful of superphosphate. Several times during the season a small amount of hardwood ashes is scattered over the beds. This routine is beneficial in hardening the canes and in giving greater depth of colour to the flowers. The bushes are grouped in four long beds, perhaps forty to a bed. There is special design neither as to height or colour.

The majority of the roses are on canina understock; some on multiflora, others on Shafter. The canina come to us very small, but eventually make tall bushes like those on other understocks, and, we think, they last longer.

We are constantly astonished at queries put to us—do we lose many roses each year? Do we regard them as annuals? Are they an expensive luxury? To all of these we answer a decided No! Most of the roses now in the gardens have been there for years. Of course, we are constantly adding modern roses, throwing out



'DICKSON'S FLAME'

'Independence' seedling × 'Nymph'

Raised by Alex. Dickson & Sons, Ltd., Newtownards
Gold Medal and President's International Trophy for the 'Best Rose of the Year'

Reproduced by kind permission of the National Rose Society of Great Britain

others which have not come up to standard. Roses as annuals—that would be an easy way to regard them, but the first year's growth is so little, even the second year fails to bring out the full possibilities of a good rose bush very often. But from then on, with a little knowledge and loving care the result merits all the waiting time and the devoted labour. Any hobby involves some expenditure. Rose-growing exercises the muscles, keeps one out of doors, wakes up the introvert, who will talk roses from dawn to dusk. Giving joy to the rosarian, it gives great pleasure to family and friends and to countless strangers who pause to admire as they pass by.

'Picture', while an old favourite, never loses its look of freshness and its beauty. Its warm pink shade of petal, the way the petals reflex and the light green of its foliage all are peculiar to 'Picture', a constant delight to us.

'McGredy's Yellow' has fascinating, bronzy foliage and buttercup-yellow blooms, distinctive reddish canes and thorns. These characteristics and the proud manner of its growth merit for it first place in our regard.

While 'Isobel Harkness', a bright yellow; 'Fred Streeter', a deeper yellow; and 'Ethel Sanday', more buff than yellow, all beautiful roses, are admired and liked, we still consider 'McGredy's Yellow' the finer yellow rose.

At least a dozen 'Peace' grace the gardens, each one an accent. 'Peace' likes to be the focus of all admiring eyes, and no wonder. Its heavily textured foliage on very tall and wide bushes and its magenta-edged, deep yellow flowers place it in a class by itself, truly a king among roses. Its only fault—it lacks scent.

'Mrs. Sam McGredy', with its alluring scarlet-coppery colouring and reddish foliage is truly a beautiful rose in all seasons. One 'Hector Deane', so very tall, has come through at least twelve winters with the same careless sort of bloom every year (orangey pink) and its delightful perfume.

Likewise, 'General McArthur', 'Crimson Glory' and 'President Herbert Hoover' have gone on blooming for a dozen years. They are real old timers, but they can hold their own with 'Bettina', 'Prelude', 'Message', 'Henry Ford', 'Josephine Bruce', and maybe

they do lend a sweeter tone to the garden than most of the newcomers.

There are so many delightfully different new roses, with so much brilliant colouring, that it is a pleasure to invite them to join your garden, to personally experiment a bit with them. Then, when asked about these new modern sorts, we can quote 'Edmund Blunden', who precisely expresses of so many relative to the modern roses they love:

*We wondered much at the rich power
Which breeds so many and many a flower
Not like the myriads known before
And each one lovely and complete.*

This is but a glimpse we have given you of the happy garden that has developed over the years at Glengariff. To one not conversant with the vagaries of our local climate drawbacks seem to outweigh the advantages we enjoy. Among advantages, we truly do have snow, in quantity, a marvellous, if not the finest of all winter coverings. Also we have leaves, old compost and spruce boughs galore. Manure is available as well as earth from annual and vegetable beds, so when fall rolls around we are ready for the task of winter protection.

The blooms taken at this time are cut with very long stems, wonderful for house decoration. We defoliate the rest of the bush to let it go dormant since we have to return to the city in October. A mixture of bone meal, ashes and a small handful of sulphur is placed around the base of each bush. Loose earth, largely the old mulch, is hilled up a couple of inches and a thick sod placed to encircle the bush. Then earth is thrown into the cavity created and more earth thrown over the entire bed—not merely around the bushes, to protect all roots. Some years, when no grass sod is available, earth alone is used to hill up bushes to a height of twelve inches. Autumn leaves are spread on all beds when the ground has frozen, or the temperature has at least turned very cold. Spruce boughs as an overlay keep leaves from blowing away.

What is done in the autumn has to be undone in the spring,

of course. Spruce is burned, leaves go to the compost heap and borrowed earth returns to home beds. Aluminium edging at earth level on all flower beds facilitates finding their natural level when spring work begins.

This type of protection applies to all hybrid teas, the floribundas, polyanthas, grandifloras. Species, old roses and modern shrub roses receive no protection. The first year after planting we give them the added benefit of a mound of compost leaves around their base.

Their Memory Liveth On

LT.-COL. W. G. MacKENDICK, D.S.O.

Legion of Honour

OUR Society lost a valued patron and an ardent supporter with the sudden passing of Col. MacKendrick at his Oakville home in September last. He was in his ninety-sixth year, and well known to many of the older members and officers of the Society. The younger members will remember him as the donor of the Col. W. G. MacKendrick, D.S.O. Challenge Trophy, for the highest aggregate score in the novice section, to promote the culture of the rose.

He was a noted horticulturist and a Past President of the Toronto Horticulture Society; a great lover of roses and at one time his Toronto Island home boasted one of the finest rose gardens in Ontario.

Col. MacKendrick was born in Galt, Ontario, and in his early life served with the Queen's Own Rifles of Canada. In professional life he was an engineer and a noted authority on road building.

At the outbreak of the First World War, although past the age for service with the fighting forces, he went to England and offered his services to the British Government. In time he became second-in-command of all road-making in France and his services were recognized with the Distinguished Service Order and the Legion of Honour.

He was a former chairman of the Toronto Harbour Commission and a life member of many noted clubs including The Toronto Canoe Club, the Royal Canadian Yacht Club, The National Club and the Canadian Military Institute.

To Mrs. MacKendrick, and the other members of the family, we extend our sympathy.

District Reports

WESTHOLME—*F. N. Parker*

ALTHOUGH the winter of 1958-9 was mild with only one week of real cold weather, which came early in January, there was a surprising amount of winter damage. After the dry fall of 1958 we expected the wood to be well hardened, but when we came to prune were surprised to find that hard pruning would be necessary, although no serious injury was suffered by the bushes.

The spring was cold and wet so growth was late although with May came a week of very warm weather that warmed up the ground and the bushes really shot ahead, even though the weather turned cold and wet again during the latter part of May and early June.

With the cooler weather the buds were slow in developing, although they did grow to a giant size, and when they opened early in July we had a marvellous display of bloom.

In common with the other growers in this area I had more bloom and better bloom than I have ever had. Although the blooms were abnormally large they were not coarse; we will remember 1959 as being the year of the wonderful bloom.

Unfortunately our lovely blooms were too late for the June shows, and this year a beautiful specimen of 'Mrs. H. M. Eddie' which was grown in complete shade, was judged the best rose in the show.

Aphids were bad and hard to control and the hot dry weather of August brought on an outbreak of red spider. This pest seems to be increasing probably due to the increased use of DDT. A few years ago they caused but little trouble, but now with every spell of hot weather we have to be on the alert with the spray-gun. The fungus disease *Anthracnose* was very prevalent on the North Pacific coast, many growers confusing it with Black Spot.

The best variety in my garden this year was the lovely 'Bayerdere' which grew strongly and produced many excellent blooms.

The floribundas did not have their usual long display this year as they were late in coming into bloom, and did not enjoy the wet weather we had in September and October. They did not keep going as well as the hybrid teas.

The few hard frosts we had in mid-November terminated the season a little earlier this year, and while it is nice to be able to cut roses in December it is better to have the plants checked earlier as there is less danger of winter damage.

To summarize; the season was late in starting, and then we had a wonderful display of high-class bloom, followed by very hot weather during which there was little growth and the plants took a rest. The fall growth was good, but there was too much rain for high-class blooms in many of the varieties.

The memory of those wonderful July blooms will always remain with us.

VICTORIA—*George Hepworth*

LAST winter was just about normal for Victoria; a few light frosts, just enough to take off the foliage and give the plants some rest. Unfortunately, however, we had a late frost in March which made it necessary to re-prune.

A very successful Summer Show was held late in June at the Crystal Gardens, and although the show was a little late for many gardens, there was an abundance of bloom of good quality. The best bloom in the show was 'Mrs. H. M. Eddie' and other outstanding blooms in the specimen class included 'Ulster Monarch', 'Baden Baden' and 'Peace'. In the garden and decorative classes very good blooms of 'First Love', 'Living Rose', 'Mme Guillot' and 'Golden Sceptre' attracted considerable attention.

At the Victoria West Summer Show a fine bloom of 'Josephine Bruce' took top honours. 'Saturnia', 'Paul's Lemon Pillar' and 'Shot Silk' were excellent in their respective classes. An arrangement of 'Souvenir de Jacques Verschuren' was very beautiful.

Insect trouble this season was negligible. Alternate sprayings with Cleansel (ammoniated soap) with nicotine sulphate and Malathion seemed to keep them under control.

On the other hand fungus diseases were quite troublesome.

Black Spot: This fungus was our worst offender. We hand-picked the garden twice, and sprayed three times with captan which finally brought it under control without too much foliage loss.

Mildew: Acti-dione PM was tested in Victoria and the results were excellent. Susceptible varieties were left alone until thoroughly infected, then sprayed three times at six-day intervals. A few days after the third treatment the plants were clean.

Rust: Although we have not had any serious attacks of this disease this season it usually appears every two or three years, and can be traced to our native species *Rosa nutkana*. As there is no known cure, destroying the host and hand-picking seems to be the only effective control, although after spraying with Ortho-rix I have noticed some improvement.

Probably the most outstanding new varieties of floribundas grown in Victoria the past two seasons would be 'Sarabanne', 'Korona' and 'Sweet Repose', and of the hybrid teas 'Perfecta', 'Anne Letts' and 'Golden Sun' have many supporters.

We should not take too much credit for our fine roses in Victoria. Mother Nature has blessed us with an excellent rose-growing climate—the mildest winters in Canada and a temperate summer which makes rose culture easy and a great pleasure.

VANCOUVER—*Archie Selwood*

FROM a rose standpoint the year 1959 started auspiciously with little or no winter-kill in evidence, save for the odd plant which had been deteriorating gradually as a result of the damage sustained in the disastrous frost of November 1955.

Our Vancouver Rose Society carried out its customary monthly programmes of educational rose talks, varied by occasional showings of coloured slides of rose subjects; and demonstrations of flower arranging and other interesting and informative work, such programmes being preceded by a brief business meeting.

In mid-March we held our annual Pruning Demonstration in the rose gardens at Stanley Park; one on Wednesday afternoon

and one on Saturday afternoon. We had the usual good attendance of several hundred rose enthusiasts who formed in circles around some half-dozen rose beds that had been left unpruned as previously arranged with the Parks gardening staff. Here experienced members of our Society worked on the rose plants, accompanying their actual pruning with explanatory comment. As usual a number of regulars braved the chilly March weather to pick up clippings with the intention of taking them home with the hope of striking cuttings. We invariably obtain a goodly number of new members for our local society at these gatherings.

The early part of the year was perfect for roses, and for the first time in many years conditions favoured those of our members who sent rose exhibits air express to the National Show in Toronto. Where we usually have trouble in picking enough top quality blooms just at the right time for shipping this year we had more than we could use, and we were delighted to learn later that our blooms arrived in good condition, and contributed to the interest of the show.

No fewer than nine of our members journeyed 400 miles to Eugene, Oregon, in early June to attend the American Rose Society district convention. On the way home we visited the International Rose Gardens at Portland, and the garden of Mrs. Nat Schoen, Vancouver, Washington. Mrs. Schoen is the incoming President of The American Rose Society, and has been an active member of The Canadian Rose Society for many years.

In August our Vancouver Society held its annual Garden Party at the home of Mr. and Mrs. Preston Sharpe, and we were glad to have with us on this occasion Mr. John Lowe of Toronto, Chairman of The Canadian Rose Society membership committee. Also present were twenty or more visitors from outlying horticultural societies as a result of contacts made by our Inter-Society Committee who periodically arrange visits to the smaller groups, providing speakers and judges when required, and in return we have their support for our Annual Rose Show.

The successful year was brought to a conclusion with the Annual Dinner Party on 17 November when an excellent dinner with suitable entertainment was enjoyed by the representative

gathering. The guest speaker of the evening, Mrs. Nat Schoen, an Honorary Vice-President of our Vancouver Rose Society, is well known throughout the continent, and it was a real pleasure to have Mr. and Mrs. Schoen with us again, and they enjoyed meeting many old acquaintances.

EDMONTON—*Edward Walker*

I WAS late in receiving my appointment of correspondent for 'District Reports' with the result that I did not have a chance to get around to see many of the other members and discuss with them the season's results. My report will accordingly not be as extensive as it otherwise would have been, but will submit a more complete report next year.

In this area cold hard winters are anticipated but the winter of 1958-9 was very severe with low temperatures and low humidity accompanied by very high winds. We did not have our usual amount of snow.

Most rose bushes are lifted here and buried in pits but last year I hilled mine with soil and then covered them with straw. Most came through the winter all right, and were well under way with the nice warm April weather, which was followed by snow and cold weather in May which caused a few casualties.

The grandifloras do well in this area and 'Queen Elizabeth' is quite popular; 'Roundelay', 'Buccaneer' and 'Montezuma' also have considerable support. With the hybrid teas the most popular would be 'Peace', 'Confidence', 'Love Song', 'Chrysler Imperial', 'La Jolla', 'Crimson Glory', 'Pink Lustre' and 'President Eisenhower'; 'Peace' and 'Confidence' had a particularly good summer and produced some really fine blooms.

We are not greatly troubled with the usual fungus diseases due, no doubt, to our low humidity and the insects we do have are easily controlled with the available insecticides.

This report is being written in late December 1959, and the weather for this area has been very mild, so if we have a continuance of this fine weather we may look forward with high hopes to a good season in 1960.

CALGARY—*Calgary Garden Club* (Mrs. W. H. Dowling)

THE rose, 'Queen of the Flowers', is becoming very popular among members of the garden club and also many other gardeners here in our beautiful City of Calgary which is situated in the southern half of the province of Alberta. It has variable climatic changes from below zero to much above freezing with warm 'chinook' winds, and then sometimes to below zero again within a matter of a few days or even a very few hours, and differs greatly to the climate of Edmonton which is situated in the central part of the province and has a much lower altitude than the Calgary area, which is approximately 3,500 feet.

The wild rose which grows profusely in the fields and along the roadsides is the emblem of the province of Alberta. At one time it was thought to be impossible to grow roses here owing to our variable weather conditions, but since people have realized it is the thawing 'chinooks' and the freezing again which causes the trouble, they now protect them by watering well just before freeze-up, and then hill them up with dirt or peat moss to about 8 inches or 10 inches or so. It also helps to put butter boxes with both ends removed over them, or collars which are made especially for them as this helps to keep the earth around them and the sap from coming up too soon and getting frozen.

The selected location of the rose-bed should be a spot which receives sun at least half of the day, and is also protected from the foraging roots of other plants and trees. The choice bushes, when planted properly with good drainage, loam, bone meal and peat moss, should have the bud union about 1 to 2 inches below the ground for this climate.

Many bushes which have been pruned early in the spring will bloom all summer until freeze-up by regular feeding with good commercial fertilizers, and also regular watering by the soaker method, and also regular spraying or dusting weekly for the control of aphids, Black Spot and other pests.

The species grown here are hybrid teas, hybrid perpetuals, climbers, bush roses, floribundas and grandifloras.

Some of the most popular varieties of hybrid teas grown here include 'Peace', of course it is tops. Among the *Reds* we have

'Crimson Glory', 'Chrysler Imperial', 'New Yorker', 'Ena Harkness', 'Etoile de Hollande' and 'McGredy's Scarlet'. *Whites*: 'White Knight', 'Ardelle', 'McGredy's Ivory', 'Madame Jules Bouche' and 'Mrs. H. M. Eddie'. *Yellows*: 'Burnaby', 'McGredy's Yellow', 'Golden Masterpiece', 'Mrs. P. S. Dupont', 'Eclipse', 'Golden Sceptre'. *Pinks*: 'The Doctor', 'Picture', 'Pink Radiance', 'First Love', 'Capistrano' and 'Helen Traubel'. Beautiful bicolours such as 'Love Song', 'Saturnia', 'Talisman', 'Sutter's Gold', 'Contrast', and many odd colours such as the rich apricot-orange 'Mojave', the orange-scarlet 'Aztec', the new 'Lavender Girl' and 'Sterling Silver'. *Grandifloras*: 'Queen Elizabeth', 'Carrousel', 'Montezuma', 'Buccaneer'. *Hybrid perpetuals*: 'Frau Karl Drushki', 'Paul Nyron', 'Mrs. John Laing' and 'George Dixon'.

As for the floribundas, we grow many beautiful ones, a few are 'Fashion', 'Alain', 'Gold Cup', 'Masquerade', 'Else Poulsen', 'Pinocchio' and 'Jiminy Cricket'.

Good climbers are 'Blaze', 'New Dawn', 'Paul's Scarlet', 'Paul's Lemon Pillar' and 'Zenith'. Climbers withstand the winter well if laid down and covered with earth or peat moss, and heavy paper or cardboard which should not be removed too early in the spring.

Shrub roses are very hardy in this climate especially the 'Grootendorsts' and the 'Hansas'.

Our annual Horticultural Show, 'a sight to behold', which is held the end of the third week in August each year, is well worth attending, not only for the rose display, but also the most wonderful showing of gladiolus, dahlias, sweet peas, cut flowers, arrangements, table centres, potted plants and all classes of fruits and vegetables, fresh and preserved.

NORTH-CENTRAL, SASKATCHEWAN—

Gary Essar, Kinderlsey

THE growing of the more tender roses has gained popularity in this area during the past few years, and I believe this increase has been due to the improved varieties and cultural methods in this rigorous climate.

The type of rose that has always had preference is, of course, the hybrid tea. 'Peace' is the favourite of this type, owing to its hardiness and ability to grow well under adverse conditions and climate. 'Crimson Glory', 'Chrysler Imperial' and 'Ena Harkness' are widely grown reds and 'White Knight' and 'Kordes Perfecta' show promise of being good roses for our climate.

Floribundas are rapidly growing in popularity due to their hardiness. 'Orange Triumph' is extremely hardy and its clustered blooms make it an all around favourite. 'Donald Prior' holds its petals and colour in our hot sun while 'Fashion', 'Independence' and 'Masquerade' are rapidly becoming favourites in this region. 'Queen Elizabeth' is another rose that suites our climate.

Although the weather in this area is never really suitable for the growing of roses this was an exceptional season. A late spring with cool weather held our hardy bush blooms longer. Summer for the most part was cool and dry, although we did have a hot spell in July; the heat has little effect on the bushes if they are thoroughly irrigated. An autumn with cool damp days caused late growth which was cut down by a heavy frost on 30 September.

Canina rootstock shows promise of being the best for this area because it is more hardy and goes into dormancy earlier.

Aphids and spider mites are the most troublesome insect pests although bud borers, which can be eradicated with nicotine sulphate, do attack our hardy bush roses. Most insects are controlled with an insecticide spray and the aphids are kept under control by the large population of ladybird beetles.

Owing to our very dry climate we are not troubled with fungus diseases.

Winter covering is very necessary in our area. Every gardener has his own pet method, although the general practice is to cover with earth, then insulate with straw or vermiculite, and then cover the whole with a box or heavy building paper. Another method equally successful is to dig up the bushes and bury them in a pit and cover the pit with straw or leaves; with this protection the majority of the bushes can be expected to winter successfully.

MANITOBA—*Mrs. W. A. MacDonald*

THIS is Manitoba calling, and we are happy to report on what we consider has been quite a good year. One important event was the affiliation of the Winnipeg Horticultural Society with the Canadian Rose Society. We feel that our Rose Section will grow, and it is becoming a very active group.

The winter of 1958-9 was not too severe, and the heavy snowfall in November 1958 was sufficient to give our roses excellent protection. In the spring most of us were gratified to find that we had no losses and, when growth started, the bushes performed well in spite of the weather. We will admit that our weather was a trifle frustrating. On the first day of May the temperature was 80°F., and three days later we had frost and snow; the thermometer readings rose and fell alternately for the rest of the month. In June and July we had a heavier rainfall than usual, and there was considerable hail damage in some districts. The hail struck our lovely Assiniboine Park a short time before the Queen's visit and, as Her Majesty was to participate in a ceremony there, it required concentrated effort to repair the damage before the great day.

Our first Flower Show this year was staged in connection with the Red River Exhibition during the last week in June. This is usually a little early for show roses here, but there were numerous entries of good quality in the various classes.

The next venture was to announce a small outdoor exhibition—roses only. This was held at the home of Mr. and Mrs. Hector Macdonald, whose garden adjoins Assiniboine Park. We were delighted with the response. The number of entries surprised us, and visitors came from Saskatchewan and Alberta. We had chosen mid-July, feeling that this probably is the best month for roses, and our choice proved to be a happy one. Many people, who might be shy of exhibiting at the conventional shows, brought their best blooms to be judged at our outdoor gathering. The informality appealed to everyone, and soon people who had never met before were standing in groups to discuss their favourite flower over cups of coffee. This type of meeting seems to create closer co-operation between the members, and we are planning to hold a similar event next July.

The International Flower Show was held 19-20 August, and the number of rose classes was increased. 'Peace' roses were given a separate class, too. There was a large increase in the number of entries, and the exhibits attracted much attention. Many spectators asked questions about rose culture, and we expect that there will be many more people growing roses in 1960.

In our last report we mentioned that Mr. H. Macdonald - the Superintendent of our Assiniboine Park - was trying out crushed sugar cane (bagasse) as a winter mulch. The results seemed to be good. However, as the winter of 1958-9 was not severe, Mr. Macdonald does not feel that this mulch was given a real test. He is making a further test this winter, and he is dividing his garden into two sections. The preliminary treatment will be the same in both sections: Application of dormant spray of sulphur-lime, against the Mildew, and DDT, which keeps away mice. Mouse seed is added for good measure. The rose bushes are pruned to a height of 12 inches. Following this, the bagasse is mounded to a depth of 6 to 8 inches, and an overlay of dried vegetation is applied. One section of the rose garden will be left with this protection; the second section will have a large sheet of polyethylene over it as an additional cover. Mr. Macdonald will advise us of the result next spring.

Mr. Eric Smith writes from Portage la Prairie that his roses showed 100 per cent survival last winter. He always uses sawdust, small shavings or coarse peat moss for his winter mulch; he finds any of these materials good, and he places boxes over the roses as a final protection. There is an annual Horticultural Show at Portage, and Mr. Smith says that the rose classes were larger than ever. Possibly more floribundas than hybrid teas were shown, but 'Peace' was the outstanding rose.

Mr. Harry Vane, of Treesbank, sent us his usual report on conditions in his area. It was very hot and dry there in early summer; however, after a good rainfall the roses were very good. The frosts were early this fall, but he particularly noted that 'Peace' and 'White Knight' were not affected by this, and they bloomed much longer than the other roses. There was little trouble with disease or insects; Mr. Vane feels that regular weekly

dusting or spraying takes care of this. He is a pioneer rosarian and, now in his eighties, he is still a going concern.

Both Mr. Smith and Mr. Vane report 30 inches of snow in their respective districts about two months ago. Since this is the best protection their roses can have, they will probably find that all their bushes have survived in the spring. We could use more snow in Winnipeg now.

Mr. Harrison, of Inglis – which is near the Saskatchewan boundary – writes that he is working towards the production of hardier roses for the prairies. He says that most such roses have a short blooming season, and at present there is a lack of variety in colour; there is a scarcity of deep red, orange and bi-colour roses in this group. Mr. Harrison is one of a number of prairie growers who are working towards the same end.

Several local rosarians reported Black Spot during August, but the damage does not appear to have been extensive. It seems that we can control this disease if we keep to a programme of regular spraying or dusting throughout the season; and there is a lot to be said for the practice of avoiding overhead watering.

We are all agreed that 1959 has been a wonderful year for roses, and we are hoping that we may be as fortunate next year. In this area so much depends on the type of winter that comes our way. However, we are optimistic. Who knows? There may be something special awaiting us around the corner in 1960. And so we wish all our friends across Canada a happy New Year, and wonderful roses in 1960.

NORTH-WESTERN ONTARIO – *H. C. Westbrook*

IN spite of a lack of snow during the past winter, the roses seemed to winter as well as, if not a bit better than, other years. It is true that many of the bushes lost everything above the earth mounds, but in spite of this, grew just as well and produced just as freely. I believe that 2 per cent would be the average winter-kill in Port Arthur's established rose gardens. The spring did not carry its frosts as late as other years, and so there were blooms the last week of June on the hybrid teas – about ten days earlier than normal.

The early summer bloom was excellent both in quality and quantity. Later in the season alternate hot and rainy days caused the first Mildew ever seen here and started the worst plague of Rust and Black Spot for many years. Captan was the only fungicide that would hold either of these in check. Due to the utter impossibility of picking every infected leaf, we would predict trouble for next year. The specimens most infected were 'Dorothy Anderson', 'Emily' and 'Ballet'. It is a pity if a beauty such as the new 'Ballet' is going to Rust out. 'Peace' was the only one to completely ignore the infection. Fortunately, early heavy frosts in October seemed to help check the trouble, and also forced 'bedding-down' with its wholesale pruning. All cut tops with their leaves have to be burnt. In spite of the infections the autumn display of bloom was the best for many years. The pleasure of picking dozens of roses in October is a rare treat.

Aside from aphids and the occasional transient caterpillar, pests were no problem. The usual sprays did their work quite efficiently.

Foliar feeding was practised even more than previously. It is very successful here in the short growing season. If carried out from the time the earth mounds are removed in the spring until 1 August, the bushes thrive beautifully, and most of the soft red growth has a chance to harden before too much frost occurs.

It would seem scarcely fair to pick outstanding varieties as all did so well. However, in spite of unfairness, it should be mentioned that this year 'Peace' excelled itself, and 'Perfecta' lived up to its promise of last year. But a word of warning about this one; a great deal of winter protection is necessary. If you should plant 'Pink Peace' give it lots of room. The floribundas, as usual, wintered well and flowered continually. The climbers had a hard time of it.

The Port Arthur Rose Show was rated the most successful to date. The large hall was filled with superlative specimens which made a magnificent sight as one stepped in the door. One of the most gratifying aspects of the show was the large number of entries in the Novice Class – a good omen. The Rose of the Show was 'Karl Herbst' with 'Golden Masterpiece' as reserve Champion.

The Fort William Show suffered severely from the heat; but some fine blooms weathered it well. 'Perfecta' took the Best in Show here. As usual the Decorative Classes in this show were outstanding.

Interest in roses is increasing annually at the lakehead. This is evidenced by the increased classes and prizes at the Rose Shows, and the greater number of entries and entrants in all classes. In addition, all rose gardens seem to be getting larger and many householders are now planting hybrid teas as borders along their front walks, and are using floribundas as foundation plantings.

While this region has not received its snow to date (20 October) the frosts have given warning, and so the bushes are either 'bedded-down' or nearly so. Now it is up to them for the winter. How they succeed we shall know about 1 May, 1960.

WINDSOR—*Emerson Mitchell*

THE year 1958, especially the last few weeks, bore such influence on rose-growing in this locality during the year 1959, that it is well to mention it. The plants were away to a good start in the spring, and bloomed almost continuously during the summer at the same time making exceptional wood which was expected to be the basis of a grand show the following year. The unusual mild weather in the fall continued into November when some fine bloom was cut on 20 November. On 21st November the bloom was dropped with the first sudden big dip in temperature, the ground was frozen and there were strong cold blasts out of the north for several days. This caught the plants full of sap and they were frozen stiff. It has not been customary with me to bank the bushes for winter until we have had sufficient frost to indicate that the plants were somewhat dormant. From now on we are going to take a better look at the calendar because at times even the SUN PARLOUR can fool you. A few yards of loam had been delivered and was ready for banking when we presumed the time was opportune but it had become frozen hard and unusable. At this late date I could possibly have covered them with straw, and would have had I known what was to follow. For this was only the forerunner

of a real tough winter when the ground remained frozen throughout and in most beds covered with ice.

To add to my discomfiture there was a shipment of roses *en route* from Europe which finally arrived on 1 December. These were mostly for fall planting enthusiasts and needless to say their enthusiasm had waned, and I had the task of trenching them till spring which resulted in some loss but those that came through were in good shape. It was fortunate that I had previously wheeled several barrows of light loam against the house wall where it received sufficient warmth to render it workable.

When spring did eventually arrive it was no surprise to find the loss was heavy with the hybrid teas and particularly with the climbing hybrid teas. There were no losses in the Frühlings Group (*spinosissima*) which were alive to the tips, the *Kordesii* climbers also took it well, the hybrid musks were cut to the ground for the first time, but they bloomed well all summer, and I learned something from nature, and will prune them more severely in the future, and finally there wasn't a single loss in the floribundas which no doubt proves their hardiness, with the advancement in form, colour and their continuous blooming qualities will soon make them as popular as they are in Europe. It was noticeable that those on canina stood the test better than those on other understocks.

In regard to hardiness in climbers I found the climbing floribundas, which are the most recurrent of the climbers, more hardy than the climbing hybrid teas. I did not have a loss with climbing 'World's Fair', 'Holstein', 'Fashion' or 'Korona', and they all bloomed several times on new wood. My overall loss in hybrid teas and climbing hybrid teas was 25 per cent, and would I am sure have been much heavier as many looked like 'goners' had they not been given several applications of tepid water with magnesium sulphate. Looking back, the year 1959 will not go on record as being a very successful one for rose-growing in these parts.

The spring was cold when the plants required heat for a start, and this was also the case with new plantings which never got away until well in the summer. The cool weather lasted into June,

when it suddenly turned hot and the heat remained with us with little rainfall throughout the summer. In September we experienced the hottest spell of the summer. However, by then the plants had made amazing recovery considering the slow start, and now in December, although after several heavy frosts, there is no sign of any damage. They have been banked with loam 10-12 inches, and covered with leaves, but this is not sufficient to entirely protect the tender climbers which have canes too heavy and rigid to layer. At one time I wrapped them with straw and burlap but there were times when this did not suffice. Now there is such a number that I just trust that Lady Luck will be kind. After wondering well into May whether some of the climbing hybrid teas would respond they eventually put on a spurt, and ended up throwing wood the like of which I have seldom seen. 'Guinée' has never before given me 16 foot canes but it didn't bloom. Climbing 'Crimson Glory' had 12 foot and bloomed a couple of times. In the bush, 'Charles Gregory' grew to 4 feet which they have never done before and produced blooms, not the usual buttonhole but of exhibition calibre. I don't know of one more beautiful and expect to plant the climbing sport this spring. 'Peace' has had a large number of offspring, and it is doubtful if any ever has come up to 'Mama' but Wilhelm Kordes really started something with 'Independence' (Kordes Sondermeldung). There are more orange scarlets around to-day than any other shade in hybrid teas, floribundas, climbers and shrubs. While some of them are good. It is possible to have too much of a good thing, and while walking down the garden path the vision is sometimes dazzled by their iridescence, and it's a refreshing relief to switch to some others more peaceful and restful on the eyes. However, roses of this hue do have something that most roses of other colours do not have. No doubt it is the pigment that is responsible but at any rate they are slow opening, and definitely longer lasting than others, whether left on the plant or cut for the house. I would mention a few of those that stand out - 'Montezuma', 'Baccara', 'Miss France'. This does not complete the list of those varieties possessing that worth-while quality. Of the newer varieties the following have done well by me the past season.

CLIMBERS

'Red Empress' – cardinal red – hybrid tea form in bud opening to large bloom not profuse at any one time, but had three blooming periods first year.

FLORIBUNDAS

'Papillon Faust', 'Miss France', 'Fata Morgana' and 'Coup de Foudre' of hybrid tea bud form, also 'Allgold', 'Paprika' and 'Dickson's Flame'.

HYBRID TEAS

We'll lead off with the most controversial rose – 'Perfecta'. Has a disappointing bud which opens to the best exhibition flower, has an upright plant with new coppery-coloured foliage turning to glossy green, not found to be as vigorous or free as 'Peace'. It has hardiness for after losing several 'Peace' and many other hybrid teas, twelve 'Perfectas' came through without any protection and made the earliest start. As a lover of all roses I would never permit honest criticism to descend to prejudice. This rose will be something to contend with on the show bench for many years to come.

Oh well, come to think of it, 'Peace' upon its debut was a long way from pleasing everybody. According to the following excerpts clipped from the 1946 *American Rose Annual* (Proof of the Pudding) 'too short stems – badly Mildewed – Black Spot – bloom small and thin shy bloomer' – and getting closer to home these interesting clips from the 1949 *Rose Society of Ontario Year Book* 'The Clearing House', 'Bloom leaves me cold – unable to share enthusiasm – does not meet standards of exhibition'.

Other hybrid teas that did well for me – 'Josephine Bruce', 'Anne Letts', 'London Town', 'Ballet' and 'Tiffany'. 'London Town' is not easily obtained as it is not listed in many catalogues because it was introduced by a smaller nurseryman and doesn't belong in 'Big Time'. Remember 'Josephine'?

At the Windsor June Show a rose awarded by the Judges a second prize, and with the ribbon blowing in the breeze turned up as 'Best in Show'. I figure that now I have seen everything.

In conclusion, with the disappointments of the past behind us, it has not dampened my ardour for rose-growing in the least, and I remain deeply grateful for what the Queen of Flowers has done for me in health, contentment of mind, and who knows—maybe spiritually.

HAMILTON—*Lela M. Brooks*

OUR Hamilton and District Rose Society was formed three years ago and since that time, through the efforts of the Board of Directors and the responsible executive, who have done an excellent job, we have had a considerable increase in membership and many new friendships have been formed.

During the past year we had several outstanding lectures, some illustrated, and with the many interesting demonstrations given by qualified rosarians our knowledge of rose culture was considerably enhanced. A tour of the acres of roses grown by our President, followed by refreshments served in the garden, was one of the highlights of the past season.

Of course the event we all look forward to each year is the Annual Rose Show held in June. Like the rest of Canada we too had a very severe winter with extensive damage to our rose bushes, and on this account it was felt that the show would not be up to standard. When the show opened in the Headquarters Building of the Royal Botanical Gardens we were all pleasantly surprised with the quantity, variety and beauty of the exhibits. With soft music in the background the members and the hundreds of visitors enjoyed a lovely show.

There was keen competition in the many classes, and the 'Floral Arrangements' showed great ingenuity and individuality, and probably the most outstanding exhibit was an arrangement of roses and driftwood. The Queen of the Show was a lovely specimen of that old favourite 'Crimson Glory' which seems to improve with the years. The Best White 'Misty Morn' and the Best Pink 'Tiffany' did credit to their species. The thanks of the Society are due to the Executive, Mrs. D. Hughes, chairman of the Show Committee and the members of her committee, all of

whom worked hard to produce such a fine show. And to the judges our thanks for a fine job done—it was not easy as there was keen competition that required the utmost in knowledge and experience. To Mr. Richard Gunnell, President of the Ontario Horticultural Society, who acted as auctioneer at the close of the show, and to the many who contributed to the success of the show goes our appreciation. The courtesy and co-operation of the officials and staff of The Royal Botanical Gardens always adds greatly to the success of the show.

To close the season's activities the Annual Meeting and dinner was held at the Collins' Hotel, Dundas, Ontario, in November. After a lovely dinner Mr. James Redman, retiring secretary, gave a full report on the activities of the year. Our new President for 1960 will be Mr. George Newcombe of Hamilton and our retiring President, Mr. Thomas Graham of Lynden, Ontario. After the business of the Meeting had been completed Mr. Graham introduced the speaker of the evening, Mr. Milton Cadsby, a Director of The Canadian Rose Society. Mr. Cadsby will be probably better known to many as the editor of *The Rose Bulletin*, and his very capable handling of his subject 'Roses' was greatly enjoyed by his audience.

And so we look forward to a New Year of greater knowledge, and the formation of many new friendships through the medium of roses.

KINGSTON—Miss A. Frances McLeod

THERE were many reports of widespread damage after the severe winter of 1958–9, and yet I have had quite a number of reports from gardeners with from fifty to 300 bushes who lost but three or four bushes. One report came from a garden of 200 bushes where the loss amounted to sixty; this was from an old established garden and the plants had been hilled up as usual.

Many of our members reported climbers killed back to the ground, and a number of old established bushes killed completely, and in many cases the younger climbers seemed to stand up better.

According to a survey of this region we find that not only do we have a greater number of rose enthusiasts but also a growing awareness of the improved cultural techniques, including the value of early spraying or dusting.

While we do not as yet have separate rose shows in the district we do have classes for roses in both the summer and autumn horticultural shows. At the Summer Show there was a fine exhibition of hybrid teas, but few floribundas or climbers as our show was a little too early for them. The best rose in the show was a beautiful specimen of 'Chrysler Imperial' exhibited by Dr. Gowland. The number of entries in the Autumn Show was below normal with a small number of really fine blooms and again 'Chrysler Imperial' was judged the best rose in the show and exhibited by Mr. Partridge.

There have been several reports of trouble from leaving apparently undamaged wood, but with damaged pith until plants had broken into leaf; this proved to be a mistake. Last spring, in order to remove all damaged pith, I had to prune my 'Frensham' hedge almost to the ground and was delighted with the result; they made magnificent growth, stronger and more sturdy than ever.

I have been experimenting with antibiotics, using terramycin with Ra-Pid-Gro on rose cuttings with considerable success. The cuttings are left under glass jars all winter and moved to their permanent quarters in the spring. At that time they average about 8 inches in height, the foliage is sprayed every two weeks with the solution, and they rapidly grow into strong sturdy bushes, blooming two or three times during the Summer. I have been carrying on these experiments for several years, and am still amazed at the growth these plants make in one season and the fine condition in which they enter the winter. I am now extending these experiments to my budded roses, especially some that are more susceptible to Black Spot.

There are many new roses brought out every year, but unfortunately many of the commercial growers stop growing many of the old beloved roses—starting roses from cuttings has helped us to regain some we had lost.

Most of my roses are budded on multiflora understock. A few years ago I received a number budded on canina, and while they were slower getting started I have been well pleased with the strong growth they have made. I have two 'Sutter's Gold' planted the same year, one on multiflora and one on canina, and the latter bush is twice as vigorous and has many more blooms. It would be interesting to hear from others on this subject.

Napanee reports that since the reorganization of their horticultural society in 1953 a greater interest in roses has been observed. One member with a garden of 100 roses reports a loss last winter of thirty hybrid teas and two climbers. One half the hybrid teas were hilled up, and when the snow came after Christmas they obtained a truck load of Christmas trees which were put on the garden. In the spring when the roses were uncovered they found as many losses among the ones protected by hilling as amongst those only protected by the evergreens.

I would like to thank the Canadian Rose Society for the wonderful help they have given us, and would like to see at our flower shows memberships in the Society given as prizes. I think any enthusiastic rose grower once introduced to the fine articles and information given in the *Annual* and *Bulletin* would remain a member for life. For the small amount I pay to be a member I cannot think of anything that brings me bigger dividends in pleasure.

MOUNT ROYAL—E. B. Jubien

'WHAT would a rose show be without roses? How could that be possible?' Well it wasn't that there were no roses at all — but I'm getting ahead of myself, let's begin at the beginning.

Our winter here in Montreal during 1958-9 was probably the best for gardeners that we have had in the last several years — cold, with lots of snow through December to March. My rose beds had three feet on them most of the time, so the bushes were green to the tips with even a few leaves on them. We had ample moisture in the ground as the snow melted, and since there was no frost on the ground, the moisture penetrated well down into the roots;

then lots of nice, warm sunshine in May and June so that everybody's roses were at their best by 20 June; and here is the sad part, the show was scheduled for the 28th.

'Well, we did all right,' as our President, Mr. A. R. B. Taylor said, 'but it sure didn't look too good at 9 a.m. in the morning with entries due in and judging to start at noon.'

The roses came in as we had hoped, not as many as last year, true, but really the quality of the bloom was very good (like you people who live in the milder parts of Canada have). Mr. W. H. Perron, the Judge, commented warmly on the very high quality of the roses shown.

There were 260 entries in all classes from thirty-five exhibitors, and while this is not as many as we had hoped for, it was quite satisfactory. This year again, the very noticeable trend towards the growing of more and more floribundas was apparent. Each year, the interest in this class of roses is growing, and also the greater use of the roses in the grandiflora class, such as 'Queen Elizabeth', 'Montezuma', 'Buccaneer', etc.; the usual well-known hybrid teas, 'Peace', 'Crimson Glory', 'McGredy's Ivory', etc., which always have a place on the show table, were there, but there were some of newer varieties, 'Gail Borden', 'Isobel Harkness', 'Perfecta', etc., that caused much comment and notebooks were filled by interested spectators with their comments and choices of roses that they would like to grow next year – and after all, isn't this a pretty important part of any show?

The programme calls for a total of fourteen colour classes in the hybrid teas, five in floribundas, two in others, plus six classes of collections and decorative arrangements, with a rose bush for the winner in each class. The Canadian Rose Society Medal is given for total points in all classes. Best Rose in the Show was 'Rubaiyat' with second choice going to 'Michèle Meilland', and third to 'Pink Peace' – all very beautiful specimens. All roses were exhibited in individual containers using large test tubes with wooden bases, which were made by a member of this Society and his two daughters as a winter project. To enhance the effect of colour in the bloom, white table-cloths are used. All displayed in a nicely furnished room with carpets and drapes gives the show the

appearance of being held in a large living-room. It was crowded and warm too, but this seems to add to the excitement. Exhibitors and spectators never seem to tire of discussing roses, and go away determined to make their bushes do better another year.

During the afternoon, the ladies under Mrs. W. H. C. Nicholas served tea and as has been described in our local press, the *Weekly Post*, 'over 100 cups and saucers were set out and they had to be washed over and over again'. So there were lots of people, and they took the opportunity of visiting the Rose Garden in Connaught Park, where the 2,000 rose bushes were in bloom. We had many visitors from other parts of the city, too, including many friends from the West End Horticultural Society, who are keen members of the Canadian Rose Society, including our Regional Director, Mr. George Borland. How welcome they are, and we hope that all those who may read this article will take heed and come another year to help make this another happy occasion.

It was a fitting way to end another successful effort on behalf of the Horticultural Society of the town of Mount Royal to stimulate the interest in roses in this area. The show was held in the Elizabeth Salon of the Town Hall just near the Rose Garden, and this makes a very nice setting for the 'Queen of Flowers' to be viewed at her best.

Editor's Note: Mr. Jubien has forgotten to mention that he won the award for high aggregate points, second and third places went to Mr. F. G. Raymant and Mr. C. J. Dyson respectively. The best rose in the show was Mr. Jubien's 'Rubaiyat', Mrs. R. E. Hillyard came second with 'Michèle Meilland' and Mr. Louis Sacks third with 'Pink Peace'. Congratulations.

ST. PAUL L'ERMITTE-L'ASSOMPTION-

REPENTIGNY—*Mr. and Mrs. R. Ferguson*

ROSE-GROWING can be described as a very new or a very old activity for this region. Finding an occasional 'old rose' tells, perhaps, of the efforts of an early settler to bring some familiar piece of the softly beautiful old land to the cruel, magnificent shore of the great river. Undoubtedly many of those early trans-

plants perished in the fierce winters. Winter still takes its toll. Even the old roses are not completely hardy; but like the people of the river, the roses are resilient, they survive.

The continuity of rose-growing discloses itself, gradually and unexpectedly, as one moves around this farming district. By a farm front door blazes a crimson 'Bourbon'; 'Harrison's Yellow' shimmers in a convent garden. A blood-red 'Grootendorst' keeps silent vigil by a wayside shrine.

The hybrid tea is not so easily found. A few years ago there were no more than a few dozen bushes in the entire region. Quickly now the situation is changing, just as the character of the region is changing from farm to suburb. The sprawling monster, metropolitan Montreal, has sent exploring tentacles into the district. Housing developments and shopping centres occupy fields that have been tilled for two hundred years. However, housing developments mean landscaping, home gardeners – and modern roses.

It is easy to grow hybrid teas and floribundas in our region. The bushes can be planted at the end of April. Established bushes push out their first crop by the second week of June. New bushes bloom at the end of June. During an average summer there is fairly constant bloom. The end comes ordinarily during late October, by which time many of the bushes will be three to four feet high and quite well formed. To this point all has been very easy. The difficult problem remains to protect the roses during the winter. Our winter is very severe. In 1956-7, temperatures as low as -35° killed such hardy bushes as spirea and philadelphus.

Deep mounding is essential if the roses are to survive. A very heavy snowfall during the past winter provided a four-foot blanket for the entire garden.

This year the winter protection was removed in April. Considerable die-back occurred, but no bushes had been killed. A very warm June gave good bloom and excellent growth. July was dry and hot. Aphids were everywhere, but a Malathion spray maintained control. August was very wet and hot. Black Spot appeared, but captan restricted its onslaught to the level of a minor nuisance. Mildew is rarely encountered here, but this summer it was

quite prevalent on the gallicas and on a hybrid perpetual, 'Marcia Stanhope'. The fungus restricted the growth of the diseased bushes. Growth resumed after one or two applications of Karathane.

The very hot summer cut down on bloom production. September and early October gave a wonderful late crop. Dozens of blooms were ready to open in mid-October when a severe frost put a full stop to rose-growing for this year.

Bush growth was phenomenal. Hybrid teas planted in May reached four feet in height. Several hybrid *spinosissimas* (Frühlingszauber) grew from their ten-inch planting size to six feet six inches.

There remains now the work of winter protection, and the long months of waiting and hoping for next spring.

QUEBEC CITY—Mrs. E. M. Little

ROSE culture in Quebec City, and its surrounding area, is a fascinating but rather expensive hobby. Our small formal rose garden was laid out in 1947 from the architect's plan of our home, and it consists of twelve rose beds around one larger central bed of two hundred and sixty bushes. Each bed is surrounded with low-clipped boxwood hedging and flagstones form the walkways. The land slopes gently towards the great St. Lawrence as we are situated just above Wolfe's Cove on the Middle Plateau of the two cliffs, and facing south.

We found the soil rich in everything needed for good growth as it was a new garden, and for the first few years we did not lose too many bushes, as they were always well covered with earth and tar paper with mill paper over the whole to keep out moisture; and when snow covered the garden deeply they wintered well. Gradually we had to replace more and more bushes, and began to encounter wintering difficulties due to thawing and freezing with cold springs. The soil was found to be in poor shape due to inadequate mineral feeding so in the fall of 1954 we lifted all the bushes and kept only the strongest. We then removed 6 inches of soil from the beds with the help of one of our Quebec City

nurserymen and replaced it in the spring. That summer the roses did much better; much more bloom and sturdier bushes.

The spring of 1958 was very cold and wet and we really were in despair. That summer the roses were very poor, so we decided in the fall to remove all the bushes and bed them down in the vegetable garden for the winter while their beds were completely turned over. Replacements for three of the side beds were ordered, and for a more continuous show of colour we decided to replace the hybrid teas in the large central bed with the floribunda 'Pinkie' which is also classified as a miniature rose.

In the spring of 1959 with ideal conditions and a warm sunny May, with no cold driving rains or heavy frost, the bushes got an excellent start. June was warm and wet, just what they needed. July came in hot and dry and the blooms were beautiful, especially the 'Pinkie' bed. We also experimented with two beds of Brownell roses, one bed of pink and the other red. The red is not as attractive as 'Crimson Glory', which has always grown well for us, but the pink variety was magnificent. The bed was a mass of bloom twice throughout the summer.

We have also had very good results with 'Peace', 'La Jolla' which improves with age as its stems get stronger, 'Pennsylvanian', 'Buccaneer' and 'Helen Traubel'. 'Forty-niner' is new with us this year and doing very well. This fall we have again lifted all the bushes and buried them in the vegetable garden. I do believe we lose less this way, and with our southern exposure if they get a good start in May they do better all summer.

We are also experimenting with crimson ramblers and climbing roses against the stone walls of our terraces which is also a southern exposure. After laying them down against the walls in the fall of 1958 they grew well in the spring, and were a mass of bloom in late June and early July. They looked very healthy this fall and should come well again next summer.

This October my husband and I motored for three weeks through Austria, Italy and France, and were greatly pleased with the 'Peace' standards we saw in many formal gardens. We are planning on planting four next spring; one in each corner of the rose garden.

If we only get another lovely May in 1960 we will be convinced that lifting the bushes in the fall is the answer to successful culture in this area. It isn't really as much trouble as covering them. I might add that they are gradually uncovered to the sun and warmth in the vegetable garden to get a start before being planted during the first twelve days of May. Just don't rush them too much; they make up for it later.

Members of the Canadian Rose Society, and all lovers of the rose, will be very welcome to come and see our Quebec gardens in July and early August. We hope they will be worth a visit, and we do have also a lovely view of the magnificent St. Lawrence.

DALHOUSIE—*L. A. Miller*

THIS past season was a very good one for roses here. Hybrid teas, grandifloras, floribundas and tree roses did very well with good bloom from late June to the latter part of October. I am not listing any particular varieties but am using this opportunity to stress how the above types can be easily grown in Northern New Brunswick.

Roses wintered very well in our district last winter in spite of the fact that this was one of the most severe winters that we have ever experienced. Winter-kill only amounted to 4 per cent in my garden, whereas in some of the more southerly parts of the Province 60 per cent and over of some rose gardens were wiped out. I believe that the reason roses came through so well here is that we always prepare for the worst, and if it comes our bushes are ready for it.

This preparation in my garden starts in early spring. As soon as the mounds are levelled off and before the foliage makes its first appearance, I spray my entire garden including the soil with a good fungicide. Bordeaux mixture is good, effective and cheap which is important when the ground is sprayed as well as the canes. This mixture is too unsightly for later use and some other fungicide should be used — one that does not discolour the foliage. Subsequent cultivations will turn up a lower level of soil which was not touched by the early spray, and this should be decon-

taminated as soon as possible. Spraying for this purpose should be combined with protective work on the foliage if the leaves are open.

Insect and disease control must be attended to without fail all through the season right up to hilling the bushes for winter. Just before hilling up a good spray of fungicide should be applied to the canes and soil. This will kill any mould that may be present and will help control the following season's Black Spot and Mildew. It is very important that the rose bush be in a healthy state if it is to survive our winters.

The other important factor in getting ready for winter is to stop using fertilizers containing nitrogen after the middle of July. Nitrogen stimulates new growth, and is very good in early spring but if applied after mid-season will produce a soft growth that would not have time to ripen before freeze-up. Phosphorus and potash on the other hand are good ripeners, and may be applied all season if your soil requires them. The quantity and strength of these two food elements will depend on the needs of your soil and if in doubt have it tested. Avoid stimulation of new growth late in the season so as to have sturdy, healthy canes before the onset of winter.

The last step in preparing a rose garden for winter comes just before freeze-up. Hill up each bush to a height of 10 inches before the ground is frozen and then to guard against lack of snowfall, the entire bed should be covered with evergreen boughs after the frost is in the ground. This will protect the roots from alternate thawing and freezing.

Rose growing is not extensive in this district, but I feel that if more gardeners would try them and follow the above procedure, they would be very well pleased with the results.

ANNAPOLIS ROYAL—*Mrs. Marie Cox*

THE winter of 1958-9 was such as we have not experienced in a great many years, and my report will accordingly not be as cheerful as I would have liked. The story is the same from all directions in this area; almost 100 per cent winter-kill. It is amazing

though how our rose-loving friends took this loss with such great spirit, for I am sure that most of the bushes were replaced or at least as many as finances would allow.

In July our Champlain Garden Club staged our usual rose show, but this year we invited two other societies, namely, Bridgetown and Digby, to participate with us. The response and co-operation was inspiring to us all for in spite of the heavy losses of the previous winter we had the best display we have ever had. Most of us are always eager and willing to share our knowledge, experience and pleasure in growing roses and it was a delightful experience to find so many new growers in our district.

Through the pooling of our resources we were able to purchase a silver rose bowl for presentation to the winner of the best rose in the show. Needless to say this did cause considerable excitement and interest with everyone trying to present their roses at their very peak of perfection. The winner this year was a member from the Bridgetown Society with a beautiful specimen of the ever popular 'Peace'.

As if to make up for our severe losses the growing season of 1959 was most unusual and spring planted bushes reached a tremendous size by July. I am writing this report on 23 November and can see that a great many of the bushes will require fall pruning or they may work themselves loose during the winter. I am sure that by this time most of the bushes have been bedded down with a soil mound for the coming winter. In addition I notice quite a number using evergreen boughs, and this combination will surely protect our beloved bushes throughout the winter. I sincerely hope so.

It is so exciting to grow a new rose for the first time; how we wait to see what it will look like. Here, as elsewhere in the rose-growing world we do try some of the newer ones each year. Sometimes we have disappointments, but they are more than offset by the thrill of a beautiful new rose. This year my personal favourite was 'Kordes Perfecta'—a beautiful bloom with many good features. 'Prima Ballerina' is also very good and 'Pink Lustre' a wonderful addition to the pinks.

After compiling the reports received from many of my friends



'TEENAGER' (H.T.)

'Ena Harkness' × 'Sutter's Gold'

Raised by D. & W. Croll Ltd., Dundee

Reproduced by kind permission of the National Rose Society of Great Britain

would have very few ills. This fall we have had a battle with Mildew, and while we have used Karathane we find it a difficult disease to cope with.

In closing, I want to thank all those who contributed information and experience to help in the compiling of this report and I shall look forward to hearing from you again next season. May you all have a very happy and successful year in 1960. Thanks also to the executive of The Canadian Rose Society for the excellent job you are doing in compiling information for our benefit and pleasure.

HALIFAX—*David F. Oland*

THE early onset of winter in November, 1958 with particularly low temperatures, was the first indication that perhaps all would not be well when spring came in 1959. We all remember what a rugged affair was the ensuing season.

The reported and observed results of winter-kill varied greatly in this area that normally has little difficulty in holding rose bushes, using the normal hilling-up plus spruce bough protection.

Some individuals lost dozens of bushes, whilst others lost none at all. I know one gardener who had a catastrophic loss — at least 200 — and yet next door — forty feet away — two beds of eighteen roses, total, that had not had a bit of winter protection suffered two losses only.

The writer is of the firm opinion that good nutrition has a tremendous bearing on a plant's ability to survive our Canadian winter. It is of interest to note that in the above mentioned examples, the garden that suffered heavily has had minimal amounts of any kind of nutrition, while in the case of the eighteen bushes, these had had consistent feeding ever since planting, five years before.

There is one thing that should be said about the past summer, from a standpoint of growing roses in this area, and that is, that this period was consistently poor. Too much precipitation and overcast — too little sun. It was not a good year for roses. Naturally, both Black Spot and Mildew were problems in some gardens.

The brighter side of the picture shows more and more individuals turning to roses, as the understanding grows that here

is a plant that yields beautiful bloom from June to November. There is no damping-off period, owing to heat, in Halifax, and the beds are in continuous production.

Of interest to the competition-minded rosarian and to the general public, is the *Provincial Rose Show* held by the Halifax County Horticultural Association during the first half of July, and open to the whole Province. Surprisingly enough, in spite of the many losses of the preceding winter, and the poor growing period, the show this year was of excellent quality. We feel that we are making progress, and would like nothing better than to pit our roses against those of other members of the Canadian Rose Society. Unfortunately, our roses are at their best 2-3 weeks after the Annual Rose Show. Perhaps, some year the Atlantic Area will be hosts for the show:

SYDNEY—*Wm. C. Buchanan*

THE winter of 1958-9 was one of the worst in this area that I can remember. Severe frosts started 21 November, and by Christmas there was 2 feet of frost in the ground, and just at this time I received a shipment of roses from France. It took about 150 gallons of boiling water to soften up enough soil to heel the bushes in.

After Christmas the winter really set in and with very little snow the frost went down about 6 feet. In early April the frost came out and we were able to ascertain the damage. The loss was 215 bushes, but as we had ordered some bushes for replacement during the winter we were not without a rose garden.

In spite of the extremely severe winter, there were many astonishing recoveries and proof of the hardiness of some of our wonderful roses. The bud (scion) as well as some of the roots of 'Danse du Feu' were out of the ground all winter, and yet when the summer warmth came around the bush really 'went to town'. Never have I ever seen a climber bear so much bloom; it literally groaned under the weight. Mr. Kordes' new 'Golden Sonne' had the same winter experience yet produced profusely proving that the bush is hardy.

The spring season was so late that it was early June before I had the last bush planted. The ground was dry and as we had no rain

we really had drought conditions. Then came July with its heat and the bushes just sulked and made no progress. With the coming of August the weather changed to rain and we had some rain on twenty-four days in August; the soil was soaked to a depth of three feet, and as the wet weather continued through September and October we had a really poor rose summer.

With so much wet weather conditions for a serious outbreak of Black Spot were ideal, but continued use of the sprayer overcame this danger, and we had no trouble on this score. With all the wet weather we grew some fine samples of 'Kordes Perfecta' but had no good bloom – all marked or washed out.

I have developed my own procedure for the preparation of beds for roses which I am pleased to outline for the benefit of those who may be interested. The bed is dug at least 2 feet in depth, into which I put a mixture of decayed leaves, compost and manure, when it is available. The whole mixture is well mixed with the soil and allowed to settle before planting. The bushes to be planted are pruned back and placed in a trench of proper depth and the roots covered. Another bush is placed in the trench and the roots covered, and this procedure is continued until the trench is filled with bushes properly spaced. The trench is then filled in and another trench made and planted in the same manner. This procedure is continued until the entire bed has been planted. The bushes are then hilled-up until they are covered over and the bed is then flooded and left to stand for ten days. After that time the bushes are uncovered, and we hope for sunny days to bring out the buds. This procedure usually presents a good show of bloom.

I don't think there is anything to touch the rose for beauty. Especially do I like to sit in the garden during the most beautiful time of the day, the half hour or so before sunset when the glow that comes over the garden is indescribable, and I always give a word of thanks to the Master Gardener for all this beauty.

PRINCE EDWARD ISLAND—G. C. Warren

THERE is an old saying that, 'a prophet is not without honour, save in his own country, and in his own house', and I am afraid

that few rose growers took cognizance of my warnings in this column last fall of impending disaster. My own roses went down to the tune of 125 out of approximately 150, and some growers lost every rose in their collection. Few beds escaped without some injury, and for most rose growers it was a case of starting out in 1959 with an entirely new collection.

My prediction for a bigger and better Prince Edward Island Rose Show in 1959, unfortunately, failed to materialize, as no show was held, but this was because of factors beyond the control of growers and not due to lack of enthusiasm. Mixed flower shows, of course, were held, but these were not widely patronized by the larger growers.

Some of the newer roses that attracted my attention this year are as follows:

'June Bride.' This is a relatively new white hybrid tea of excellent form and substance and I would rate it with the best whites. It appears vigorous, free-flowering and very delightful in the bud.

If you like something striking, you should also grow a plant or two of 'Careless Love'. This rose, to say the least, is different. The colour is a blend of white and rosy red, and the rosy streaks and blotches are stamped over a white background. The fragrance of this rose is excellent and the bushes are tall and vigorous. You'll be pleasantly surprised and so will your friends with this novelty.

Of a somewhat similar name is 'Love Song', but there the similarity ends. This one is a blend of watermelon-pink and is a big, bright, beautiful bouncy creation. The flowers are large and may contain upwards of 100 petals, although the flowers I observed were hardly so robust. Rated as a fragrant free bloomer, I suggest you give it a thorough testing.

'Montezuma' is classed as a grandiflora or improved floribunda, but the amateur will find it difficult to distinguish this one from the regular hybrid teas. The flowers are a brilliant rosy salmon and are wonderfully formed in bud and blossom. The long slender buds open to forty petals, forming high-centred flowers that are produced on long-stemmed plants. This grandiflora should be

excellent for cutting, and for garden decoration is among the best.

'White Butterfly' also struck me as being very lovely, and the strong plants with their abundant white blooms made a very firm impression. This new hybrid tea is bound to win the favour of discriminating gardeners, and I feel quite sure you'll be charmed by its nice appearance.

Another hybrid tea not yet widely catalogued is 'Helen Hayes'. This is a very nice rose of yellow and orange. The bushes are only medium strong but the flowers are very attractive and produced freely. This one looks very promising and should be watched closely.

'Alaska', seen for the first time in the nursery, also was marked down for testing. This hybrid tea is a lovely white with yellow castings and appears to be a fine rose in every respect.

The first new grandiflora appeared in 1955 and was very appropriately named 'Queen Elizabeth'. It was named for its lovely flowers which combined the floriferousness of the floribundas with the magnificent qualities of the hybrid teas. The colour is a subtle and breathtaking blending of carmine rose and dawn pink which is set off by the deep green, heavy-textured, glossy foliage. This rose appears to have exceptional vigour and considerable disease resistance, a combination of qualities lacking in many varieties. The blooms, as you might expect, are produced on long, almost thornless, stems and seem to grow more beautiful with age.

Rated as one of the most fragrant roses in existence, the variety 'Capistrano' has many other good qualities to single it out for acclaim. The bushes are vigorous and upright growing and the pink-coloured blooms have good cut-flower quality. This rose is bound to be popular in any garden.

While not a strong grower by any stretch of the imagination, I found the colour of the 'Queen of Bermuda' to be very appealing. The geranium-red blooms are sure to draw your attention and the tight buds are most appealing. Another very attractive bloom in this category is 'Golden Rapture', rated by many as the best yellow rose in existence.

The floribundas also include many new and nearly new varieties and one of the oddest is 'Masquerade'. This variety combines three colours in one—white, yellow and red—and is a real standout in any garden. A newer addition having somewhat the same characteristics, and said to be an improved 'Masquerade', is 'Mexicali Rose'. 'Sundance' also fits into this novelty class, and combines pink and yellow with other shadings in a very pleasing mixture.

A floribunda I have admired for some time, but which is not widely catalogued is called simply 'Mary'. This is a bright salmon pink and said to be a sport of 'Orange Triumph'. It is very showy in the garden and appears to have better than average vigour and hardiness.

'Yellow Holstein' also rates with the best and produces enormous trusses of yellow flowers fading to a not-unpleasing lemon. This variety appears to be very resistant to sun and rain and is a strong, healthy grower.

NEWFOUNDLAND—*Harry Hamlyn*

MOST types of roses grow well here providing of course that they are properly looked after; fertilized, pruned and cultivated, and regularly sprayed with insecticides. Aphids and leaf-eating insects can really be a problem and from my own experience I find that we have to spray every 7–10 days to maintain effective control. Nicotine sulphate and a combination of DDT and Malathion spray have given excellent results.

Most hybrid tea varieties do well here as do the Brownell sub-zero roses and the grandiflora 'Queen Elizabeth'. Floribundas can be highly recommended, and every year they can be relied on for a beautiful display from late July to October. Of the climbing roses the most popular would include 'Paul's Scarlet', 'Blaze', 'Dorothy Perkins', 'Excelsa', 'New Dawn', 'Coral Dawn', 'Goldilocks' and 'Aloha'. All these climbers have proven to be quite hardy, and after their second year of growth they produce a really good show of bloom. 'Golden Climber' which is supposed to have a good reputation in most parts of North America is

definitely no good for Newfoundland conditions and absolutely refuses to bloom.

Winter-killing of rose bushes need not be severe if the grower takes the trouble to follow the simple procedure of tying the bush to a supporting stick and then covering the bed and bushes with a 12-inch layer of sawdust and planer shavings. We have been using this method in our Parks Department for several years with very little winter loss, and all our pruning is delayed until the following spring.

To prevent the dry sawdust from blowing around and making our borders and lawns untidy a few evergreen branches are placed over the sawdust which acts as a blanket and protects the rose beds from the wind. Previous to using the sawdust mixture we tried hilling with soil, leaves and barnyard manure but find that the sawdust blanket is much better and winter losses are lower. We also tried lifting some of our hybrid teas and burying them in a pit, and while under this protection they wintered well, but had the disadvantage of being about a month late in flowering. The sawdust mixture has been proven best because it could be taken off gradually in the spring as the frost came out. The bushes immediately start throwing young shoots and come into bloom a month earlier. The only bushes we now lift are the standard rose trees and they cannot be otherwise wintered.

At our Annual Flower Show and Exhibition this year some nice roses were shown and the judges from the mainland made special comment as to their high quality, and we are looking forward to a great increase in rose culture in this area.

The Rose Analysis

WE have to announce with regret that Mr. S. B. Bartlett, C.A., who did such an excellent Analysis for us last year, has had to retire from this participation due to ill-health.

The Analysis this year has been prepared by Mr. Archie Selwood of Vancouver, who needs no introduction to rosarians throughout Canada. Mr. Selwood has loaned us his talent, experience and ability, and the many innovations and improvements in the Analysis spring from his knowledge of roses, and an appreciation of the information it should bring to our members.

It will be noted that the Analysis has been divided into two zones, East and West, as it was thought that the variation in the climate, growing season and soil would warrant separate charts. However, the end-result indicates that there is not a great deal of difference in the varieties selected by experienced growers in both areas. This is no doubt due to the fact that most Eastern contributors reside in districts that are admittedly not quite so temperate as the West Coast of British Columbia, but are still well within the zone where roses can be successfully grown. It is apparent that most of the varieties popular in the West can be grown in the East with a little extra attention to winter protection, also the popularity of some varieties in one area not being apparent in the other is in some cases due to availability.

Dr. Frank L. Skinner of Dropmore, Manitoba and Mr. Georges Bugnet of Legal, Alberta are two of the many plant hybridizers in Western Canada who are working constantly to provide the prairie residents with rose varieties that will withstand the rigours of prairie winters; our hopes go with them in this work. Both of these gentlemen sent in contributions to the Analysis but the hardy varieties named could not be expected to make the final lists. Our sincere thanks to them and also to our Regional Director, Mr. G. C. Warren, Senior Horticulturist with the Department of Agriculture, Charlottetown, P.E.I. for rounding up the fine

contribution to the Analysis from that province, as he did last year.

Mr. Selwood has brought to our attention some weaknesses in the Analysis, and in the interval between now and the next *Annual*, these will have a careful study by a committee set up for the purpose, and we hope to have them eliminated before another Analysis is prepared.

The number of contributors has been greatly increased this year, and it is gratifying to note this list of experienced growers has been extended to cover the rose-growing areas of the nation from Vancouver Island to Newfoundland, and over the border to include the gardens of a few of our American friends. This increase in participating gardens, and their much wider distribution, will make accurate comparisons with previous years impossible, but it is very interesting to learn the favourites of an important cross section of the nation's experienced growers.

In the Exhibition Class the Eastern gardens continue to give 'Peace' first position with a wide margin, followed by 'Crimson Glory', which edged 'Burnaby' from second position; 'Rubaiyat' moving up to take over fourth place – a nice gain from last year. The Western growers also like 'Peace' for first position, but with a reduced majority over their beautiful 'Burnaby' which is quite understandable. 'McGredy's Yellow' and 'Ena Harkness' also have a lot of supporters.

The hybrid tea class for General Garden Cultivation remains the same as last year for the Eastern chart; 'Peace', 'Crimson Glory', 'Ena Harkness' and 'Michèle Meilland' being the varieties so honoured. The Westerners think 'Burnaby' should be included in this select standing at the expense of 'Crimson Glory'.

Autumn Blooming Roses (H.T.) remains the same as last year in the Eastern chart, 'Peace' being followed by 'Crimson Glory', 'Ena Harkness' and 'Michèle Meilland', and it is interesting to note that this is the same rating given by the Eastern gardens for General Garden Cultivation. The Western gardens also prefer 'Peace', but think 'Ena Harkness', 'Show Girl' and 'Burnaby' should follow in that order.

Fragrant roses this year replaces most fragrant roses as previ-

ously recorded, but little change has been made in the leaders. 'Crimson Glory', 'Charles Mallerin', 'Chrysler Imperial' and 'Hector Deane' were the first four favourites in the East, this being the same as last year's chart except that 'Chrysler Imperial' has moved up to third position thus dislodging 'The Doctor'. The Western participants do not agree with the Eastern sense of smell and prefer 'Crimson Glory', 'The Doctor', 'Hector Deane' and 'Sutter's Gold' in that order.

'Crimson Glory' still holds first position in the Eastern chart for Bedding Roses (H.T.) followed by 'Peace', 'Michèle Meilland' and 'Ena Harkness' - 'Peace' having pushed 'Picture' out of this group. The Western voters put 'Picture' right back in first position, followed by 'Ena Harkness', 'Mme Henri Guillot' and 'McGredy's Sunset'.

Climbing and rambling roses are still led by 'Paul's Scarlet Climber' and 'The New Dawn' in the Eastern chart, followed by 'Blaze' and 'Coral Dawn' that came up from nowhere to fourth position. 'Paul's Lemon Pillar' fell from third to ninth position. The Westerners like 'The New Dawn', 'Blaze', 'Cl. Mrs. Sam McGredy' and 'Paul's Scarlet', this selection being similar to the Eastern selection with some variation in the placing of 'Cl. Mrs. Sam McGredy' being favoured over 'Coral Dawn' which was not rated at all.

Floribunda roses have the same favourites as last year, namely, 'Frensham', 'Fashion', 'Vogue' and 'Donald Prior'. With the Eastern selection the Western members agree except that they prefer 'Masquerade' over 'Donald Prior'.

No change of note has taken place in grandiflora roses. 'Queen Elizabeth' still maintains an unthreatened position followed by 'Montezuma', 'Carrousel' and 'Buccaneer' in the Eastern chart, the same as last year. The Western voters go along with that selection except that they would put 'Buccaneer' ahead of 'Montezuma'.

We feel that the growing popularity of miniature roses warrants the chart that has been prepared this year, and while no comparison is possible the varieties have been listed as reported.

To summarize, the most popular all-purpose hybrid tea roses

grown extensively throughout the country would be 'Crimson Glory', 'Peace', 'Ena Harkness' and 'Michèle Meilland' in that order. These are all good solid roses that have been around for fourteen years or more, and are now well established in the gardens and hearts of Canadians.

CONTRIBUTORS

- | | |
|---|--|
| Mr. A. M. Anderson, Ontario | Mr. G. Hughes, Prince Edward Island |
| Mrs. J. H. Baillie, Ontario | Mr. H. E. Hyndman, Prince Edward Island |
| Mr. E. Billington, Ontario | Mr. E. B. Jubien, Quebec |
| Mr. W. G. Borland, Quebec | Mr. W. J. Keenan, Ontario |
| Mr. O. E. Bowles, Ontario | Dr. R. G. Lea, Prince Edward Island |
| Mr. W. C. Buchanan, Nova Scotia | Mrs. H. P. Marshall, Ontario |
| Mr. M. A. Cadsby, Ontario | Mr. L. A. Miller, New Brunswick |
| Mr. J. H. Cameron, Prince Edward Island | Mr. E. Mitchell, Ontario |
| Mr. R. A. M. Clark, Michigan State | Dr. C. T. Moyle, Ontario |
| Mrs. Rosemary Cox, Nova Scotia | Prof. A. H. MacAndrews, N.Y. State |
| Mr. H. C. Cross, Quebec | Mrs. A. L. Naismith, Ontario |
| Mr. C. A. Davis, N.Y. State | Mr. A. A. Norton, Ontario |
| Mr. C. F. Davis, Ontario | Mr. C. R. Stephenson, Ontario |
| Mr. F. F. Dufton, Ontario | Dr. F. W. Tidmarsh, Prince Edward Island |
| Mr. and Mrs. R. Ferguson, Quebec | Mr. H. C. Westbrook, Ontario |
| Mrs. J. J. Gallagher, Quebec | Mr. C. T. Wilson, Ontario |
| Mr. T. E. Harris, Newfoundland | |
-
- | | |
|---------------------------------------|---------------------------------------|
| Mr. F. Blakeney, British Columbia | Mrs. M. E. Matthews, British Columbia |
| Mr. L. H. F. Bryans, British Columbia | Mrs. J. McLachlan, British Columbia |
| Mr. Georges Bugnet, Alberta | Mrs. R. E. Murdock, British Columbia |
| Mr. H. L. Davidson, Oregon State | Mr. F. N. Parker, British Columbia |
| Mr. J. A. Davidson, British Columbia | Mr. Y. R. Rhodes, British Columbia |
| Mr. J. H. Eddie, British Columbia | Mr. E. C. Rice, British Columbia |
| Mr. F. Edmunds, Jr., Oregon State | Mr. A. Selwood, British Columbia |
| Mrs. H. J. Faulkner, British Columbia | Mrs. Nat Schoen, Washington State |
| Mr. E. N. Grant, British Columbia | Dr. F. L. Skinner, Manitoba |
| Mr. G. Hepworth, British Columbia | Mr. P. Sharpe, British Columbia |
| Mrs. E. Hicks, British Columbia | Mr. W. Walkinshaw, British Columbia |
| Mr. A. C. Howell, British Columbia | |
| Mrs. W. M. MacDonald, Manitoba | |

EXHIBITION ROSES, EAST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Peace'	368	1946	Yellow, edged pink
2	'Crimson Glory'	222	1935	Velvety crimson
3	'Burnaby'	197	1951	Creamy yellow
4	'Rubaiyat'	153	1946	Rose red
5	'Chrysler Imperial'	147	1952	Deep crimson
6	'Confidence'	145	1952	Pink blend
7	'Karl Herbst'	142	1950	Scarlet to deep red
8	'Show Girl'	139	1946	Deep rose pink
9	'Ena Harkness'	131	1946	Glowing red
10	'Kordes Perfecta'	126	1957	Cream, edged pink to crimson
11	'McGredy's Yellow'	123	1933	Pale yellow
12	'Josephine Bruce'	112	1953	Black crimson
13	'Diamond Jubilee'	87	1947	Cream, orange buff
14	'Charlotte Armstrong'	80	1940	Carmine rose
15	'Margaret'	69	1954	Clear light pink
	'McGredy's Ivory'	69	1929	Creamy white
	'Gail Borden'	69	1957	Rose, yellow blend

EXHIBITION ROSES, WEST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Peace'	309	1946	Yellow, edged pink
2	'Burnaby'	263	1951	Creamy yellow
3	'McGredy's Yellow'	259	1933	Pale yellow
4	'Ena Harkness'	192	1946	Glowing red
5	'Anne Letts'	176	1953	Pale pink
6	'Kordes Perfecta'	165	1957	Cream, edged pink to crimson
7	'Show Girl'	162	1946	Deep rose pink
8	'Crimson Glory'	156	1935	Velvety crimson
9	'Margaret'	103	1954	Clear light pink
10	'Pink Favourite'	94	1956	Pink
11	'Ulster Monarch'	87	1949	Apricot buff
12	'McGredy's Ivory'	74	1929	Creamy white
13	'Diamond Jubilee'	70	1947	Cream, orange buff
14	'Sam McGredy'	67	1937	Cream, tinged buff
15	'Mrs. Sam McGredy'	60	1929	Copperty orange
	'Chrysler Imperial'	60	1952	Deep crimson
	'Rubaiyat'	60	1946	Rose red

H. T. ROSES FOR GENERAL GARDEN CULTIVATION, EAST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Peace'	337	1946	Yellow, edged pink
2	'Crimson Glory'	232	1935	Velvety crimson
3	'Ena Harkness'	184	1946	Glowing red
4	'Michèle Meilland'	157	1945	Light salmon coral
5	'Karl Herbst'	121	1950	Scarlet to deep red
6	'Tiffany'	119	1954	Deep pink, gold base
7	'McGredy's Yellow'	118	1933	Pale yellow
8	'Josephine Bruce'	112	1953	Black crimson
9	'Helen Traubel'	97	1951	Apricot pink
10	'Charlotte Armstrong'	89	1940	Carmine rose
11	'Show Girl'	84	1946	Deep rose pink
12	'Margaret'	79	1954	Clear light pink
13	'Burnaby'	78	1951	Creamy yellow
14	'Kordes Perfecta'	76	1957	Cream, edged pink to crimson
15	'Rubaiyat'	73	1946	Rose red
	'Virgo'	73	1947	White

H. T. ROSES FOR GENERAL GARDEN CULTIVATION, WEST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Peace'	300	1946	Yellow, edged pink
2	'Ena Harkness'	190	1946	Glowing red
3	'Michèle Meilland'	157	1945	Light salmon coral
4	'Burnaby'	148	1951	Creamy yellow
5	'McGredy's Yellow'	139	1933	Pale yellow
6	'First Love'	130	1950	Pink, pale to deeper
7	'Crimson Glory'	118	1935	Velvety crimson
8	'Mrs. Sam McGredy'	110	1929	Coppery orange
9	'Show Girl'	102	1946	Deep rose pink
10	'Virgo'	96	1947	White
11	'Charlotte Armstrong'	88	1940	Carmine rose
12	'Pink Favourite'	85	1956	Strong pink
13	'Tiffany'	82	1954	Deep pink, gold base
14	'Grand'mère Jenny'	79	1950	Peach, shaded pink
15	'Sutter's Gold'	75	1949	Yellow, flushed pink
	'Mary Wheatcroft'	75	1945	Copper flame

AUTUMN BLOOMING ROSES (H.T.) EAST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Peace'	351	1946	Yellow, edged pink
2	'Crimson Glory'	234	1935	Velvety crimson
3	'Ena Harkness'	177	1946	Glowing red
4	'Michèle Meilland'	170	1945	Light salmon coral
5	'Josephine Bruce'	165	1953	Black crimson
6	'Rubaiyat'	131	1946	Rose red
7	'Show Girl'	121	1946	Deep rose pink
8	'Chrysler Imperial'	114	1952	Deep crimson
9	'Mrs. Sam McGredy'	99	1929	Coppery orange
10	'Tiffany'	86	1954	Deep pink, gold base
11	'Helen Traubel'	79	1951	Apricot pink
12	'Karl Herbst'	75	1950	Scarlet to deep red
13	'McGredy's Yellow'	72	1933	Pale yellow
14	'Kordes Perfecta'	70	1957	Cream edged pink to crimson
15	'Charlotte Armstrong'	68	1940	Carmine rose

AUTUMN BLOOMING ROSES (H.T.) WEST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Peace'	201	1946	Yellow, edged pink
2	'Ena Harkness'	170	1946	Glowing red
3	'Show Girl'	130	1946	Deep rose pink
4	'Burnaby'	98	1951	Creamy yellow
5	'McGredy's yellow'	96	1933	Pale yellow
6	'First Love'	94	1950	Pink, pale to deeper
7	'Mrs. Sam McGredy'	92	1929	Coppery orange
8	'Josephine Bruce'	81	1953	Black crimson
9	'Crimson Glory'	76	1935	Velvety crimson
10	'Michèle Meilland'	74	1945	Light salmon coral
11	'Tiffany'	73	1954	Deep pink, gold base
12	'Sutter's Gold'	71	1949	Yellow, flushed pink
13	'Fantasia'	68	1942	Yellow, peach
14	'Signora'	67	1936	Orange to red and pink
15	'Gordon Eddie'	65	1949	Apricot pink

FRAGRANT ROSES, EAST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Crimson Glory'	394	1935	Velvety crimson
2	'Charles Mallerin'	248	1947	Dark velvety crimson
3	'Chrysler Imperial'	238	1952	Deep crimson
4	'Hector Deane'	156	1938	Salmon cerise
5	'Mirandy'	153	1945	Garnet red
6	'Josephine Bruce'	152	1953	Black crimson
7	'Sutter's Gold'	148	1949	Yellow, flushed pink
8	'The Doctor'	147	1935	Silvery pink
9	'Etoile de Hollande'	145	1919	Deep scarlet
10	'Ena Harkness'	112	1946	Glowing red
11	'Rubaiyat'	103	1946	Rose red
12	'Christopher Stone'	95	1934	Dark crimson
13	'Red Ensign'	89	1948	Scarlet crimson
14	'Dame Edith Helen'	87	1926	Glowing pink
15	'Rose of Freedom'	66	1948	Cardinal red

FRAGRANT ROSES, WEST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Crimson Glory'	242	1935	Velvety crimson
2	'The Doctor'	184	1935	Silvery pink
3	'Hector Deane'	171	1938	Salmon cerise
4	'Sutter's Gold'	154	1949	Yellow, flushed pink
5	'Charles Mallerin'	137	1947	Dark velvety crimson
6	'Chrysler Imperial'	114	1952	Deep crimson
7	'Mirandy'	106	1945	Garnet red
8	'Etoile de Hollande'	98	1919	Deep scarlet
9	'Girona'	96	1936	Orange and pink
10	'Polly'	93	1928	Cream to pink and gold
11	'Red Ensign'	92	1948	Scarlet crimson
12	'Tiffany'	90	1954	Deep pink, gold base
13	'Josephine Bruce'	88	1953	Black crimson
14	'Ena Harkness'	67	1946	Glowing red
15	'Rubaiyat'	65	1946	Rose red
	'Eden Rose'	65	1953	Pink, lighter reverse

BEDDING ROSES (H.T.) EAST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Crimson Glory'	396	1935	Velvety crimson
2	'Peace'	238	1946	Yellow, edged pink
3	'Michèle Meilland'	202	1945	Light salmon coral
4	'Ena Harkness'	178	1946	Glowing red
5	'Picture'	174	1932	Rose pink
6	'Josephine Bruce'	143	1953	Black crimson
7	'Chrysler Imperial'	117	1952	Deep crimson
8	'McGredy's Sunset'	89	1936	Yellow, flushed scarlet
9	'Mme Henri Guillot'	81	1938	Orange red
10	'Grand'mère Jenny'	78	1950	Peach shaded pink
11	'Fantasia'	76	1942	Yellow peach
12	'Christopher Stone'	74	1934	Dark crimson
13	'Mrs. Pierre S. Dupont'	68	1938	Yellow
14	'Tzigane'	65	1951	Yellow, red bi-colour
15	'Margaret'	61	1954	Clear light pink

BEDDING ROSES (H.T.) WEST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Picture'	163	1932	Rose pink
2	'Ena Harkness'	139	1946	Glowing red
3	'Mme Henri Guillot'	136	1938	Orange red
4	'McGredy's Sunset'	128	1936	Yellow, flushed scarlet
5	'Josephine Bruce'	117	1953	Black crimson
6	'Fantasia'	105	1942	Yellow peach
7	'Violinista Costa'	86	1936	Orange scarlet
8	'Michèle Meilland'	85	1945	Light salmon coral
9	'Sunset Glory'	68	1948	Vivid yellow to scarlet
10	'Crimson Glory'	67	1935	Velvety crimson
11	'Polly'	66	1928	Cream shaded pink and gold
12	'Tzigane'	64	1951	Scarlet, yellow reverse
13	'Virgo'	60	1947	White
14	'Saturnia'	58	1936	Scarlet and gold
15	'Shot Silk'	56	1924	Cerise flushed yellow

CLIMBING AND RAMBLING ROSES, EAST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Paul's Scarlet Climber'	236	1916	Scarlet
2	'The New Dawn'	234	1930	Soft pink
3	'Blaze'	133	1932	Scarlet
4	'Coral Dawn'	95	1952	Coral pink
5	'Gladiator'	80	1955	Light red
6	'Golden Showers'	66	1956	Bright yellow
7	'Danse du Feu'	64	1954	Orange scarlet
8	'Guinée'	61	1937	Black crimson
9	'Paul's Lemon Pillar'	60	1915	Pale lemon yellow
10	'Glenn Dale'	58	1927	Cream
11	'Blossomtime'	57	1951	Cameo pink
12	'Zéphirine Drouhin'	55	1868	Carmin pink
13	'Dr. W. Van Fleet'	54	1910	Pale pink
14	'Elegance'	52	1938	Spectrum yellow
15	'Thor'	51	1940	Crimson

CLIMBING AND RAMBLING ROSES, WEST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'The New Dawn'	158	1930	Soft pink
2	'Blaze'	137	1932	Scarlet
3	'Cl. Mrs. Sam McGredy'	130	1937	Coppery orange
4	'Paul's Scarlet'	128	1916	Scarlet
5	'Paul's Lemon Pillar'	110	1915	Pale lemon yellow
6	'Ruth Alexander'	93	1937	Orange flame
7	'Guinée'	84	1937	Black crimson
8	'High Noon'	80	1940	Bright yellow
9	'Meg'	76	1954	Apricot yellow to pink
10	'Mrs. Arthur C. James'	72	1933	Golden yellow
11	'Golden Showers'	70	1956	Bright yellow
12	'Glenn Dale'	66	1927	Creamy white
13	'Cl. Shot Silk'	65	1937	Cerise flushed yellow
14	'Danse du feu'	59	1954	Orange scarlet
15	'Elegance'	56	1938	Spectrum yellow

FLORIBUNDA ROSES, EAST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Frensham'	277	1948	Scarlet crimson
2	'Fashion'	275	1949	Salmon peach
3	'Vogue'	145	1951	Deep coral cherry
4	'Donald Prior'	119	1934	Scarlet crimson
5	'Alain'	117	1946	Scarlet crimson
6	'Else Poulsen'	114	1924	Rose pink
7	'Circus'	108	1956	Yellow, buff pink
8	'Independence'	106	1949	Orange scarlet
9	'Spartan'	93	1954	Reddish salmon orange
10	'Little Darling'	87	1956	Yellow pink blend
11	'Masquerade'	78	1949	Yellow, pink red
12	'Lilibet'	69	1954	Dainty pink
13	'Rosenelfe'	63	1938	Delicate pink
14	'August Seebauer'	61	1950	Pink
15	'Sarabande'	60	1957	Dazzling scarlet
	'Concerto'	60	1953	Glowing scarlet

FLORIBUNDA ROSES, WEST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Frensham'	205	1948	Scarlet crimson
2	'Fashion'	167	1949	Salmon peach
3	'Vogue'	137	1951	Deep coral cherry
4	'Masquerade'	118	1949	Yellow, pink red
5	'Circus'	116	1956	Yellow, buff pink
6	'Little Darling'	104	1956	Yellow, pink blend
7	'Spartan'	102	1954	Reddish salmon orange
8	'Lilibet'	96	1954	Dainty pink
9	'Rosemary Eddie'	95	1954	Bright pink
10	'Donald Prior'	90	1934	Scarlet crimson
11	'Jiminy Cricket'	87	1954	Tangerine red
12	'Sarabande'	85	1957	Dazzling scarlet
13	'Independence'	83	1949	Orange scarlet
14	'Poly Prim'	79	1954	Yellow
15	'Cocorico'	73	1950	Glowing scarlet
	'Alain'	73	1946	Scarlet crimson
	'Rosenelfe'	73	1938	Delicate pink

GRANDIFLORA ROSES, EAST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Queen Elizabeth'	308	1954	Clear pink
2	'Montezuma'	266	1955	Orange salmon
3	'Carrousel'	181	1950	Brilliant dark red
4	'Buccaneer'	162	1952	Yellow
5	'Dean Collins'	48	1953	Carmine
6	'Starfire'	46	1959	Maroon red
7	'Queen of Bermuda'	32	1956	Orange red
8	'June Bride'	16	1957	Creamy white
9	'Roundelay'	14	1954	Dark red
10	'Merry Widow'	13	1958	Crimson to rose red
11	'El Capitan'	12	1958	Glowing cherry red
	'Gold Coast'	12	1958	Yellow
13	'Reno'	6	1957	Coral salmon

GRANDIFLORA ROSES, WEST

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Queen Elizabeth'	206	1954	Clear pink
2	'Buccaneer'	166	1952	Yellow
3	'Montezuma'	162	1955	Orange salmon
4	'Carrousel'	111	1950	Brilliant dark red
5	'Roundelay'	86	1954	Dark red
6	'Dean Collins'	62	1953	Carmine
7	'Gay Heart'	41	1951	Rose pink
8	'Starfire'	28	1959	Bright currant red
9	'El Capitan'	27	1958	Glowing cherry red
10	'Gold Coast'	18	1958	Yellow
11	'Governor Rossellini'	11	1958	Rose red
12	'June Bride'	6	1957	Creamy white

MINIATURE ROSES, EAST AND WEST

The ranking of the varieties listed below is based on only a few reports sent in by interested members who wished to have miniatures included in the analysis. All varieties named by reporters have been listed.

<i>Position</i>	<i>Name</i>	<i>Points</i>	<i>Introduced</i>	<i>Colour</i>
1	'Cinderella'	49	1952	White, edged carmine
2	'Tom Thumb' (Peon)	46	1935	Crimson, white eye
3	'Midget'	45	1940	Rose red
4	'Baby Gold Star'	37	1940	Yellow
5	'Baby Masquerade'	35	1956	Yellow, pink red
6	'Tinker Bell'	33	1954	Pink
7	'Rouletti'	31	1939	Pink to mauve
8	'Perla de Montserrat'	30	1945	Pink
9	'Rosina' (Josephine Wheatcroft)	29	1951	Yellow
10	'Pour Toi' (For You)	24	1946	White, tinged yellow
11	'Red Imp' (Maid Marion)	23	1951	Deep velvety red
12	'Little Buckeroo'	19	1956	Red, white centre
13	'Sweet Fairy'	18	1946	Pink
14	'Red Elf'	16	1945	Red, white centre
15	'Robin'	13	1956	Rich deep red
16	'Twinkles'	12	1954	Pink, shaded white
17	'Dwarfking'	10	1957	Blood red
18	'Frosty'	6	1953	White
19	'Candleflame'	4	1956	Yellow orange
20	'Polka Dot'	3	1956	White
21	'Bit O'Sunshine'	2	1956	Yellow

The Clearing House

Compiled and Edited by W. J. Keenan

THE Society is indebted to the thirty-six contributors who so kindly participated in this project. Our thanks and appreciation is extended for their co-operation.

It has been the practice in the past to limit the review to varieties introduced within the past five years. Exception to this is made, due to the fact that in many instances roses are not known in Canada until one to three years after the date of introduction. On the suggestion of one of our excellent growers and members, we are making a note under the rose which will be appearing in the Clearing House for the last time. We believe this new departure will give all members across Canada a better chance to become acquainted with the names and values of the newer roses.

We are listing the rose under the name it is known in Canada: for example the rose 'Thais' in Europe is listed by Canadian Nurseries as 'Lady Elgin', therefore it will be listed as 'Lady Elgin'. The rose known by either 'Kordes Perfecta' or 'Perfecta' will be listed as 'Kordes Perfecta' in view of the fact that a polyantha rose of this name was introduced in 1920, and also it is noted that W. Kordes & Son in Germany, had shown same in their catalogue as 'Kordes Perfecta'.

We hope that the information such as type of soil and sun exposure together with number of bushes, number of years grown, average height and the understock on which the roses are budded will be of both interest and service to our members: however, the difference in climatic conditions must be taken into consideration.

We have two excellent reporters this year from the United States. Prof. MacAndrews of Syracuse, New York, and Mr. Robt. A. Clark of Saranac, Michigan: in each case the growing conditions are somewhat similar to those encountered in Ontario.

We extend to all our members an invitation to contribute to 'The Clearing House' in the future. The more participants the more accurate the result and will thereby be most beneficial to all of us.

LIST OF CONTRIBUTORS

(with Name, Address, Nature of Soil and Sun Exposure)

Anderson, Mr. A. M., 78 Cheritan Avenue, Toronto 12, Ont.: clay loam; full sunshine to partial shade.

Antoft, Mrs. O. H., Kentville, N.S.: sandy loam; full sunshine to partial shade.

Baillie, Mrs. J. H., 89 Burnhamthorpe Road, Islington, Toronto 18, Ont.: heavy clay; full sunshine.

Billington, Mr. E., 3170 Kingston Road, Toronto 13, Ont.: clay loam; partial shade.

Blakeney, Mr. F., 7255 Salisbury Avenue, South Burnaby, B.C.: light sandy loam; partial full sun.

Bryans, Mr. L. H. F., Box 15, Comox, Vancouver Island, B.C.: sandy loam; full sunshine.

Buchanan, Mr. W. C., 189 Park Street, Sydney, N.S.: sandy loam; full sunshine to partial shade.

Butwick, Mr. A. N., R.R. No. 2, Hamilton, Ont.: clay loam; partial shade.

Cadsby, Mr. M. A., 64 Bannockburn Avenue, Toronto 12, Ont.: clay; full sunshine to partial shade.

Clark, Mr. R. A. M., Box 263, Saranac, Mich., U.S.A.: sandy loam, eight hours sunshine.

Duffton, Mr. F. F., 254 Ontario Street, Cobourg, Ont. (Rose Garden at Housey's Rapids, Muskoka, Ont.): light clay loam; full sunshine to partial shade.

Gallagher, Mrs. J. J., 'Glengariff', St. Gabriel de Brandon, Que.: clay loam; full sunshine to partial shade.

Haslett, Mr. A. J., 108 Johnston Avenue, Willowdale, Ont.: clay loam; full sunshine.

Jubien, Mr. E. B., 150 Vivian Avenue, Town of Mount Royal, Montreal 16, Que.: light clay; full sunshine.

Keenan, Mr. W. J., 107 Cortleigh Boulevard, Toronto 12, Ont.: clay loam; full sunshine to partial shade.

Lawton, Mr. J. W., 1179 Princess Avenue, London, Ont.: sandy loam; full sunshine.

MacAndrews, Prof. A. H., 206 Dewitt Road, Syracuse 3, N.Y., U.S.A.: clay; full sun to light shade.

MacDonald, Mrs. W. A., 174 Baltimore Road, Winnipeg 13, Man.: black clay loam; full sunshine.

Marshall, Mrs. H. P., 9 Golf Club Road, Toronto 13, Ont.: sandy loam; partial to deep shade.

Meiklejohn, Mrs. A. B., 135 Bombay Avenue, Downsview, Ont.: clay loam; full sunshine.

Mitchell, Mr. Emerson, 1557 Bruce Avenue, Windsor, Ont.: clay loam; full sunshine.

Morrison, Mrs. George, Tara, Ont.: full sunshine to partial shade.

Murdoch, Mrs. R. E., 2785 Crescent View Drive, North Vancouver, B.C.: sandy loam; full sunshine.

Naismith, Mrs. A. L., 116 Arnold Street, Hamilton, Ont.: heavy clay; full sunshine.

Norton, Mr. A. A., 22 Eastview Crescent, Toronto 12, Ont.: heavy clay loam; full sunshine.

Palmer, Mr. A. C., 14 South Street, West Dundas, Ont.: medium to heavy clay; northern exposure.

Parker, Mr. F. N., Mount Sicker Road, Westholme, Vancouver Island, B.C.: heavy clay; full sunshine.

Rhodes, Mr. Young R., 910 McNaughton Avenue, Victoria, B.C.: heavy clay; full sun.

Schramm, Mr. Harry Dunnville, Ont.: sandy loam; full sunshine to partial shade.

Selwood, Mr. Archie, 1450 West 40th Avenue, Vancouver 13, B.C.: gravelly sandy loam; full sunshine to partial shade.

Steinbergs, Mrs. J., 109 Reid Street, Corner Brook, Nfld.; heavy clay to clay loam; full sunshine to partial shade.

Stephenson, Mr. C. R., 227 Havelock Street, Toronto, Ont.: clay loam; partial shade.

Stollery, Mr. Alan, 281 Heath Street East, Toronto, Ont.: clay; part shade.

Westbrook, Mr. H. C., 48 Prospect Avenue, Port Arthur, Ont.: clay loam; full sunshine to partial shade.

Wilson, Mrs. C. T., 80 Ellerslie Avenue, Willowdale, Ont.: clay loam; full sunshine to partial shade.

Wilson, Mr. Clifford T., 80 Ellerslie Avenue, Willowdale, Ont.: clay loam; full sunshine.

The following abbreviations apply throughout: Years – yrs.; Plants – pls.; Understocks – Canina – Can.; Multiflora – Mult.; Ragged Robin – R.R.; Shafter (Dr. Huey) – Shaf.; Climbing – Cl.; Floribunda – Fl.; Grandiflora – Gr.; Hybrid Eglanteria – H.Eg.; Hybrid Moschata – H.M.; Hybrid Spinosissima – H.Sp.; Hybrid Tea – H.T.; Large-flowered Climber – L.C.; Rambler – R.; *Rosa Kordeii* – R. Kor.; Shrub – S.

AIDA, H. T. (Mansuino. Int. J. & P. '56). Mrs. Marshall (1 pl.; 2 yrs.; Shaf.) believes this variety is a real addition to the garden. Bloomed freely with long-lasting blooms of good colour: 'An excellent red and very fragrant.' Mr. Jubien (1 pl.; 2 yrs.; Mult. 30 in.) advises it was healthy but not the best red in his garden. Mr. Clark (1 pl.; 3 yrs.; 35 in.): Vigorous and disease-resistant—bud form and colour lovely; however, opens too fast for easy exhibition—good fragrance.

ALCHYMIIST, S. (Kordes '56). Mr. Anderson (2 pls.; 3 yrs.; Mult.) reports plants wintered well, have branches 12 ft. long with average bloom. Pale apricot colour. Mr. Norton (1 pl.; 3 yrs.; Can.) had severe winter-kill, however, had good new growth; disease-free. For Mr. Buchanan (1 pl.; 1 yr.; Can.) good tall-growing plant with clean foliage. This shrub rose only blooms once each year.

ALLGOLD, Fl. (Le Grice '57). Superlatives are in order for this very lovely floribunda was the comment of Mr. Buchanan (9 pls.; 1 and 2 yrs.; Can. 36 in.). It was agreed by Mr. Bryans (1 pl.; 1 yr.; Mult. 36 in.), Mr. Dufton (4 pls.; 1 yr.; Can.), Mr. Lawton (1 pl.; 1 yr.; Can.), Mr. Mitchell (2 pls.; 2 yrs.; 36 in.), Mr. Parker (1 pl.; 1 yr.; Mult., 30 in.), Mr. Rhodes (1 pl.; 1 yr.; Mult.), that it was the best of the yellows—well described by Mr. Mitchell: 'Tops in yellow floribundas'; only Mr. Lawton had slow growth and scarce bloom. He is hoping for better results next year as he ends his comments by stating 'I like it'. Looks like a winner some of us passed over.

ALPINE GLOW, Fl. (Tantau. Int. J. & P. '54). Mr. Blakeney (1 pl.; 2 yrs.; Mult., 24 in.) likes this rose as the plant is robust and branching. Very floriferous with large-size blooms of a brilliant orange-scarlet.

AMA, Fl. (Kordes '55). For Mr. Butwick (1 pl.; 1 yr.; Can. 24 in.) this was one of the better floribundas with dark orange-scarlet blooms which are long lasting; bush upright with abundant disease-resistant foliage. Mr. Norton (1 pl.; 1 yr.; Can.) agrees that the foliage is disease-resistant. He would, however, welcome more bloom. Mr. Buchanan (2 pls.; 2 yrs.; Can.) advises his plants had slow recovery after a severe winter, therefore, would like to wait for another year before passing judgment.

AMY, Fl. (Von Abrams '54). 'Amy' did little for Mr. Clark (1 pl.; 1 yr.; 11 in.) in its first year. Bloom was sparse and there was some late Black Spot.

AMY VANDERBILT, Fl. (Boerner '56). Mr. Billington (1 pl.; 2 yrs.; Mult. 24 in.) and Prof. MacAndrews (2 pls.; 2 yrs.; Mult., 20 in.) both agree that this rose has nothing to recommend it, being a muddy colour and a Black Spotter. It has found a friend in Mr. Clark (1 pl.; 4 yrs.; 27 in.) who admits he likes 'Amy Vanderbilt', it having brought him two blue ribbons this year. He advises that while the plant is sprawling it is disease-resistant and contrary to most, he likes the colour and his wife likes it for corsage work. It is a good job we do not all like the same girl.

ANGELA, Fl. (Kordes '57). Mr. Lawton (1 pl.; 1 yr.; Can.) was pleased with this floribunda in its first year—good growth with healthy foliage, nice shaped bloom of good bright colour. Looks promising.

ANGEL WINGS, H.T. (Lindquist '58). Both Mrs. Gallagher (3 pls.; 1 yr.; Shaf.) and Mr. Dufton (1 pl.; 1 yr.; Mult.) advise good performance in the first year. Vigorous with healthy foliage. Blooms being cream, edged with deep pink. However, Prof. MacAndrews (1 pl.; 1 yr.; Mult., 24 in.) states that there was scant bloom with erratic colour. For the writer (1 pl.; 1 yr.; Mult., 30 in.) this is one of the best I have had in the first year—good growth and no disease, and while I agree with Prof. MacAndrews that the blooms were scarce they were excellent.

ANNA WHEATCROFT, Fl. (Tantau '58). Mr. Buchanan (2 pls.; 1 yr.; Can.) advises that this is a good floribunda with single flowers of light to dark vermilion, there being a touch of orange at the base. As there was not too much growth in first year he will report more fully next year.

ANNE LETTS, H.T. (Letts '54). It was generally agreed that this was a good exhibition rose. Comments Mr. Bryans (4 pls.; 2 yrs.; Mult., 48 in.) 'The Queen of the light pinks'. Vigorous bush with large healthy foliage, with flowers of beautiful form and colour. Mrs. Naismith (1 pl.; 1 yr.; Mult.), Mr. Cadsby (1 pl.; 1 yr.; Can.), Mr. Rhodes (2 pls.; 1 and 2 yrs.; Mult.), Mr. Parker (3 pls.; 1 and 2 yrs.; Mult., 42 in.), Mr. Selwood (2 pls.; 2 and 3 yrs.; Mult.), all agree that the bush is above average height in growth having beautiful reflexed blooms; however, Mr. Selwood and Mr. Parker both advise that it has murderous thorns. Mrs. Murdoch (3 pls.; 3 yrs.; Mult.) is enthusiastic about this rose. I like her description on the exhibition value of same: 'As a show rose it stands up well but

should never be cut in light bud, cut when three-quarters open and run lickety-split to the show and watch the blue ribbons this proud beauty will win (fragrant too).' Mr. Westbrook (1 pl.; 1 yr.; Mult.) states that while it was good strong grower he found the foliage susceptible to both Rust and Black Spot. Mr. Stollery (1 pl.; 1 yr.; Can.) has no serious fault to find except the blooms were not profuse and on the small size. Mr. Blakeney (2 pls.; 1 yr.; Can., 18 in.) thinks he must have received poor plants, the few blooms they produced were very good even if only moderate size. He is looking forward to better performance next year. This variety for the writer (1 pl.; 1 yr.; Mult. 36 in.) was excellent, good growth, healthy foliage and delightful flowers.

ARDELLE, H.T. (Eddie. Int. Harkness & Wyant '57). Mrs. Gallagher (1 pl.; 3 yrs.; Mult.) reports growth very tall and that at last 'Ardelle' had the summer to show off. Its beautiful long-pointed buds opened into magnificent creamy blooms. Mr. Clark (1 pl.; 2 yrs.; 31 in.) agrees that a perfect bloom from 'Ardelle' is beautiful; however, many have split centres and it has Black Spot in very wet weather. Mr. Selwood (1 pl.; 4 yrs.; Mult.) states that this rose is not for the Vancouver climate as it needs one that is warm and dry where it can be very good. With the writer (1 pl.; 3 yrs.; Can. - 1 pl.; 2 yrs., Mult.) this is a strong growing variety averaging 3 ft., maybe I am lucky as there has been no disease. I agree with Mrs. Gallagher as to the quality of the bloom, the only fault being the number of split centres. Mr. Selwood's diagnosis is correct - this is a warm, dry weather rose.

ARLENE FRANCIS, H.T. (Boerner '57). Mrs. Marshall (1 pl.; 2 yrs.; Shaf.) has nothing exciting to report about the performance of this rose - while there was a fair amount of bloom they were rather loose and the texture of the petals poor, the foliage was good, which is substantiated by Mr. Selwood (1 pl.; 1 yr.; Mult.) who also advises that while its colour and form were good and had fragrance it was not outstanding. Mr. Clark (1 pl.; 2 yrs.; 29 in.) will keep 'Arlene' just for the colour - a beautiful clear yellow and the fact that it holds its colour well. The bloom, however, opens too fast. The writer (1 pl.; 2 yrs.; Mult., 24 in.) agrees with Prof. MacAndrews' comments - vigorous blooms, fade too fast. Plant being weaker in second year, and as I need the room will discard.

ASCHERMITTWUCH, L.C. (Kordes, '55). Here is a very tall grower that surprised Mr. Buchanan (1 pl.; 1 yr.; Can.) in its first year with pliable canes that reached a height of 10 ft. in a bad growing year. We are looking forward to next year's report.

AUDIE MURPHY, H.T. (Lammerts '57). For Mr. Bryans (1 pl.; 2 yrs.; Mult., 54 in.) it is a tall vigorous bush with good foliage. Beautiful bud, opening flowers, both as regards colour and form - open flowers thin - blooms well in autumn when its colour is best. Prof. MacAndrews (2 pls.; 2 yrs.; Mult., 36 in.) agrees that it is a tall grower but spindly. The streamlined blooms are a lovely colour; however, they open too fast and go too fast. Mr. Selwood (2 pls.; 3 yrs.; Mult.) mentions the nice tapering buds and long stems, also that there was not much form in the mature flower. There was, however, lots of fragrant bloom. Mr. Cadsby's (1 pl.; 1 yr.; Mult.) comments were terse, strictly a bud rose of a very fleeting nature.

AURORA, C1. (Kordes '56). In the severe winter the canes were winter-killed for Mr. Norton (1 pl.; 3 yrs.; Can.); he reports, however, that the new growth was equal to previous year. Foliage disease-resistant.

AZTEC, H.T. (Swim '57). Mrs. Meiklejohn (1 pl.; 1 yr.), Mrs. Murdoch (1 pl.; 1 yr.; Mult.) are in agreement as to the sprawling habit of this variety, which Mrs. Murdoch says spoils it as a good bedding rose; even Mr. Selwood (1 pl.; 1 yr.; Mult.) also advises that while the plant is vigorous it spreads a little - they all concur as to the attractiveness of the colour and the good form of the bloom. For Mr. Clark (1 pl.; 3 yrs.; 26 in.) the colour is breathtaking even if the bloom is sparse. The plant is healthy but poorly shaped, the large blooms being too heavy for the slender stems. Prof. MacAndrews (3 pls.; 2 yrs.; Mult. 36 in.) reports vigorous plant with unusual colour but not enough bloom. This rose did not get well established for Mr. Westbrook (1 pl.; 1 yr.; Mult.) until late fall; on the basis of one year's performance, would not consider it one of the better reds - is willing to be convinced. I wonder what is the true description of the unusual colour of this rose.

BABY BLAZE, Fl. (Kordes. Int. J. & P. '54). This floribunda had a good year for Mr. Lawton (1 pl.; 2 yrs.; Mult.) with good healthy growth and plenty of nice colourful bloom, and on (6 Nov.) date of report, still had several. For Mr. Selwood (1 pl.; 2 yrs.; Mult.) there are better red floribundas.

BABY MASQUERADE, Min. (Tantau. Int. J. & P. '56). Mr. Wilson (1 pl.; 2 yrs; own root) reports that the bloom is long lasting (over a week on the bush) and continuous - 8 June to freeze-up. Plant well formed and has kept within the bounds desirable for a miniature. Very colourful for foreground planting; a red blend is the comment of Prof. MacAndrews (1 pl.; 2 yrs.; Mult., 18 in.). Mr. Jubien (1 pl.; 2 yrs.; Mult., 12 in.) is not enthusiastic about miniatures. Thinks this one is very nice with attractive colour—not many blooms. Mr. Clark (1 pl.; 1 yr.; 8 in.) had an unfortunate experience in that half a shipment of new miniatures he received was infected with Black Spot. Hopes for better luck next year.

BACCARA, H.T. (Meilland. Int. C.-P. '57). Mr. Dufton (8 pls.; 2 yrs.; Can. and Mult.) describes the colour of this rose as striking vermilion, whereas to Mr. Westbrook (2 pls.; 1 yr.; Can.) it is dark vermilion with black shadings and unusually attractive. Both state that the plant is tall growing with medium sized blooms to which Mr. Mitchell (1 pl.; 1 yr.; 24 in.) agrees. It seems to be Black Spot and Rust-resistant, the blooms being long lasting when cut and excellent for decorative work. Mr. Mitchell describes the foliage as dark leathery and concurs that the bloom is long lasting. Ladies—is this one of the roses you are looking for?

BACCHUS, H.T. (Dickson '53). A very good garden rose is the consensus of opinion by all our reporters: Mr. Bryans (2 pls.; 2 and 3 yrs.; Mult., 42 in.), Mr. Cadsby (1 pl.; 2 yrs.; Can.), Mr. Selwood (1 pl.; 4 yrs.; Can.), Mr. Westbrook (3 pls.; 3 yrs.; Can.). Proved to be exceptionally hardy for Mr. Cadsby during the past severe winter. For Mr. Westbrook it is very hardy, a vigorous upright grower with a continuous flow of well-formed scarlet blooms. Mr. Selwood describes the colour as light to medium red, and states that it is a fairly good exhibition variety and fragrant but, 'There are better reds'. The colour for Mr. Bryans was rosy scarlet to cerise. The plants are tall with a moderate amount of bloom, flowers having good form and colour. The writer agrees as to the tall growth and vigour of this variety as he has had three plants for four years, one plant in 1957 growing 5 ft. It is one of my favourites. (*Last year for reporting this rose.*)

BADEN-BADEN, H.T. (Kordes '53). Mr. Parker (2 pls.; 3 yrs.; Mult.) reports tall upright growth 3 to 4 ft. with good foliage—blooms with a slight fragrance but of exhibition quality—the red is a good colour and bright; however, it is bad for Mildew. I am pleased with this variety (2 pls.; 3 to 4 yrs.; Can., 40 in.). (*Last year for reporting this rose.*)

BAD NEUENAH, R. Kor. (Kordes '58). This was a late-planted rose for Mr. Buchanan (1 pl.; 1 yr.; Can.), did not have much growth. Only one cluster of fully double blooms, deep carmine—will reserve judgment for another year.

BALLET, H.T. (Kordes '58). This rose is a glowing pink and the bloom has good form according to Mrs. Gallagher (3 pls.; 1 yr.; Can.), Mr. Mitchell (1 pl.; 1 yr.; 30 in.), Mr. Buchanan (3 pls.; 1 yr.; Can., 24 in.), Mr. Westbrook (2 pls.; 1 yr.; Can.). For Mr. Mitchell plant was vigorous, bushy with light green foliage. All agreed that the open flower is large and arresting. Both Mr. Stollery (1 pl.; 1 yr.; Can.) and Mr. Cadsby (1 pl.; 1 yr.; Can.) were disappointed in the colour and Mr. Stollery said more than half the blooms had split centres. Even though foliage is a lover of Black Spot Mr. Westbrook was so charmed with the perfection of form and the fragrance that he ordered four more plants—looks like a valuable addition.

BAYADERE, H.T. (Meilland '54). An excellent rose in the orange-pink colour with blooms well-formed, usually one to a stem is the enthusiastic comment of Mr. Westwood (1 pl.; 3 yrs.; Can.); he further advises the plant must have lots of elbow-room after the first year. For Mr. Dufton (1 pl.; 1 yr.; Can.) it was vigorous and pleasing. Mr. Selwood (1 pl.; 1 yr.; Can.) likes the well-formed blooms, valuable for either garden or exhibition—has a fair fragrance. Mr. Bryans' plants (3 pls.; 1 and 2 yrs.; Mult., 30 in.) had rather spreading growth of medium height, the foliage being fairly disease-resistant—large

blossoms of heavy texture. Mr. Stollery (1 pl.; 1 yr.; Can.) is not excited about this one; he states 'Pretty nice shape—may do' and it has still not impressed Mr. Cadsby (1 pl.; 2 yrs.; Can.) although he admits it is an important novelty.

BEAUTE, H.T. (Mallerin '53). The consensus of opinion: this is an excellent rose. Mr. Palmer (2 pls.; Mult.) advises he would call this rose in the top five hybrid teas. Mrs. Naismith (2 pls.; Mult., 42 in.) also calling for it to be among the ten best roses for the next few years. Mr. Parker (2 pls.; 2 yrs.; Mult., 42 in.) calls it the 'Oh' and 'Ah' rose of the garden. More people falling in love with it than any other variety. Mr. Selwood (1 pl.; 4 yrs.; Can.) had an improvement in freedom of flowering this year—with bud and early bloom, form excellent. His final analysis 'would have been a great rose with more petals'. To this Mr. Westbrook (1 pl.; 1 yr.; Mult.) agrees. Mr. Bryans (3 pls.; 2 yrs.; Mult., 33 in.) states that it is an excellent bedding rose, being well named with blossoms of heavy texture—orange apricot in colour. In agreement is Mr. Cadsby (1 pl.; 1 yr.; Can.) as he comments on the outstanding bud which commands a spot in every garden. Mrs. Marshall (2 pls.; 2 yrs.; Can.) sings the praises of this beautiful rose—gorgeous colour, not a prolific bloomer but blossoms worth waiting for, with the fault of the petallage being a little thin. She is sure more people are going to be growing 'Beauté'. For Mr. Stollery it flies open quickly—very nice before it flops. Mrs. Naismith had the same comment. Looks like a splendid bedding rose with one fault—the uninteresting shape of the open bloom.

BELLE BLONDE, H.T. (Meiland '55). 'This is one of the clearest yellow roses I have yet seen' is the comment of Mr. Buchanan (2 pls.; 2 yrs.; Can.) on a rather tall plant which is disease-resistant. Blossoms freely. Mrs. Steinbergs (6 pls.; 2 and 3 yrs.; Mult., 30 in.) agrees as to the disease-resistant qualities of this variety (even red spider did not bother them), she likes the attractive orange-yellow unfading blossoms—she has only one worry, that being the lack of hardiness. It was slow in starting for Mr. Cadsby (1 pl.; 1 yr.; Can.) who likes the orange-yellow blossoms though they are not exhibition type. For Mr. Dufton (1 pl.; 3 yrs.; Mult.) it is an attractive bedder; the colour being bright golden yellow.

BENGT M. SCHALIN, S. (Kordes '56). Mr. Buchanan (1 pl.; 1 yr.; Can.) advises this rose was planted late, therefore did not make much growth. Feels it will be a good variety when fully grown.

BETSY McCALL, Fl. (Boerner '56). Mrs. Baillie (1 pl.; 3 yrs.; Mult.) says though it was a sturdy bush, she finds the colour muddy. It bloomed more freely for Mr. Norton (2 pls.; 2 yrs.; Can.), also had more Black Spot and Mildew—will replace unless it proves more disease-resistant next year. For Mr. Clark (1 pl.; 3 yrs.; 24 in.) and Prof. MacAndrews (1 pl.; 3 yrs.; 30 in.) it was a nice florabunda—with blossoms of clean coral pink. It is free blooming, free of disease and good flower form with the fault of being weak-necked so that the clusters droop, is the comment of Mr. Clark. 'Betsy' has a real friend in Mrs. Marshall (1 pl.; 3 yrs.; 2 pls.; 1 yr.; Shaf.) who enthusiastically calls it an outstanding floribunda, lovely for corsages or arrangements—she would like an entire bed of this variety.

BETTINA, H.T. (Meiland '53). Mr. Bryans (4 pls.; 1 and 2 yrs.; Mult. 36 in.), Mr. Parker (2 pls.; 3 and 4 yrs.; Mult., 36 in.), Mr. Westbrook (1 pl.; 2 yrs.; Can.) all agree as to this being an excellent bedding rose with good foliage. The flowers lovely in colour—orange shaded pink and bronze. Mrs. Gallagher (1 pl.; 4 yrs.; Mult.) admits that the lovely colour is its brightest asset. Mr. Blakeney (1 pl.; 3 yrs.; Can.) agrees that the colour is most attractive but complains that the plant has not done too well—weak and spindly growth with too few blossoms.

BINGO, H.T. (Robichon '56). A real surprise exclaims Mrs. Naismith (1 pl.; 1 yr.; 48 in.), grows tall with good exhibition blossoms—has good perfume and is very prolific. Being a red it occasionally blues.

BIT O' SUNSHINE, Min. (R. S. Moore '56). Best yellow miniature I've seen, is the comment of Mr. Wilson (1 pl.; 2 yrs.; own root, 15 in.); has dense growth—lush foliage, not out of bloom all summer. Mr. Clark (1 pl.; 1 yr.; 4 in.) hopes for better things next year. His plant having Black Spot—states bud colour was good but open blossoms faded badly.

BORDER BEAUTY, Fl. (de Ruiter '57). Mr. Buchanan (3 pls.; 1 yr.; Can.) reports colour of this one is a sparkling crimson which glows and stands out in a bed. Plants bushy and low growing with semi-double flowers in good sized clusters. Slight fragrance.

BORDER CORAL, Fl. (de Ruiter '57). For Mr. Buchanan (6 pls.; 1 and 2 yrs.; Can., 42 in.) this is a tall growing plant with good sized clusters. A deeper 'Fashion'-coloured rose with flowers about the same size.

BRENNENDE LIEBE (Burning Love) Gr. (Tantau '56). The classification of this rose is in doubt, listed by one European nursery as a floribunda-grandiflora and called by one of our reporters a flowering shrub—it is evidently a strong grower with large buds opening to 3 in. blooms of dark scarlet or burning red for Mr. Mitchell (1 pl.; 2 yrs.; Can., 60 in.), Mr. Morton (2 pls.; 2 yrs.; Can.), Mr. Anderson (1 pl.; 2 yrs.; Mult.). No diseased foliage says Mr. Norton, and Mr. Anderson thinks his plant would do better in full sun as growth is slow.

BRIDAL ROBE, H.T. (McGredy '53). This rose is being discarded by both Mrs. Murdoch (2 pls.; 2 yrs.; Can.) and Mr. Westbrook (1 pl.; 4 yrs.; Can.). The honeymoon is over, states Mr. Westbrook. After four years of coddling it has not improved in growth, strength of stem or habit of clustering.

BROWN EYES, Fl. (Marsh '59). Mr. Butwick (1 pl.; 1 yr.; Mult., 12 in.) reports this is a low very bushy variety with glossy foliage, quite disease-resistant. Flowers not too abundant being semi-double, colour a washed-out lavender pink. Not impressed.

BROWNELL'S RED PILLAR No. 73, L.C. (Brownell '54). This one disappointed Mr. Clark (1 pl.; 2 yrs.) flowers being few and not very red. Branches sprawling, not pillar type.

BROWNELL'S PINK PILLAR No. 82 (Brownell '54). It freezes to ground-level each winter for Mr. Westbrook (2 pls.; 3 and 4 yrs.; Mult.) and Mr. Clark (1 pl.; 2 yrs.) also reports that it suffers badly in winter. Both report blooms are of good form but few in number.

BROWNELL'S PINK PILLAR No. 83 (Brownell '54). Mr. Westbrook's (1 pl.; 3 yrs.; Mult.) comment is 'withstands winter better than No. 82. Blooms smaller and more in clusters; but seems to have more sparkle'.

BROWNELL'S YELLOW PILLAR No. 84 (Brownell '54). 'It is a lovely yellow colour with nice form and fragrance' advises Mr. Clark (1 pl.; 2 yrs.); however, it has too few flowers.

BURNABY, H.T. (Eddie '52. Int. U.S.A. P. & D. '54). All those reporting agree that this is a first-class exhibition rose. Mr. Bryans (3 pls.; 1 and 2 yrs.; Mult., 33 in.), Mr. Cadsby (1 pl.; 3 yrs.; Mult.), Mrs. Murdoch (5 pls.; 5 yrs.; Mult.), Mr. Parker (3 pls.; 4 yrs.; Mult., 36 in.), Mr. Selwood (5 pls.; 7 yrs.; Mult.), Mr. Westbrook (3 pls.; 2, 3 and 6 yrs.; Mult.). Mrs. Murdoch is really enthusiastic, she writes 'This is it'. Plant vigorous, healthy with upright habit. Flower yellow in bud changing to white as it unfolds and on the bench it lasts out for a two-day show. It is close to perfection for Mr. Bryan as regards form and colour. Foliage displaying average disease-resistance. 'Prolific bloom', states Mr. Parker. Mr. Westbrook in Northern Ontario and Mr. Cadsby advise that it is inclined to be tender, and as Mr. Westbrook notes it takes a long time to get started in the spring. As to fragrance, Mr. Selwood comes to its defence stating that it has a fair amount as evidenced by the fact it received six points out of ten at the trials of the National Rose Society for fragrance and also by his own tests. The writer has had four plants of this rose from three to five years. To me it is a wonderful rose except it is a trifle tender in the East. (*Last year for reporting on this rose.*)

CAFE, Fl. (Kordes '56). Mr. Bryans (1 pl.; 1 yr.; Mult., 24 in.), Mrs. Gallagher (1 pl.; 3 yrs.; Can.), Mr. Parker (3 pls.; 2 and 3 yrs.; Mult. 24 in.) all agree that this rose has a delightful fragrance. Mrs. Gallagher comments, 'likes a tropical summer, quite attractive this year'. 'Definitely worth its place in the garden', remarks Mr. Bryans, the plant for him having bushy characteristics with good foliage, flowers of an intriguing colour but rather loose in form. Mr. Parker had profuse bloom; however, he cautions the variety needs hot sun.

CANDLEFLAME, Min. (R. S. Moore '45). Mr. Wilson (1 pl.; 2 yrs.; own root, 10 in.) advises this variety has a large single bloom, colour like a ripe peach. Bloom intermittent—foliage petite.

CASCABEL, Fl. (Dot '57). Mr. Buchanan (2 pls.; 1 yr.; Can. 36 in.) likes this variety, being one of the most vigorous plants he has. Flowers are small, a glowing crimson and grow in bunches. Colour holds while petals drop cleanly.

CHAMPS ELYSEES, H.T. (Meilland '57). 'Am pleased with performance in first year,' says Mr. Dufton (1 pl.; 1 yr.; Can.). Velvety-crimson blooms sure to make you want more.

CHANTECLERE, Fl. (Gaujard '56). Mr. Buchanan (2 pls.; 1 yr.; Can.) comments that the flowers look like camellias, the colour being glowing scarlet. Plant is short-growing, bearing small neat clusters and is always in bloom.

CHANTRE, H.T. (Kordes '58). Tall compact bushes which are free blooming with exhibition sized blooms of good form is the essence of Mr. Buchanan's (3 pls.; 1 yr.; Can.) report. Flowers are deep yellow and orange with Mr. Mitchell (2 pls.; 1 yr.; 24 in. Can.) reporting same as solid bronze. For Mr. Mitchell the growth was upright with heavy foliage, blooms, however, rather scarce.

CHARMING MAID, Fl. (Le Grice '53). Mr. Parker (3 pls.; 3 and 4 yrs.; Mult., 36 in.) advises its one fault is the fewness of the blooms. The bushes are sturdy with tall canes and good foliage. (*Last year for reporting this rose.*)

CIRCUS, Fl. (Swim '56). One of Mr. Bryans' (2 pls.; 1 and 2 yrs.; Mult., 30 in.) favourites, plant having strong sturdy growth with good foliage and bloom production. Mr. Billington's plant (1 pl.; 2 yrs.; Mult., 30 in.) improved over its first year. Calls it one of the best bi-colour floribundas. Mr. Cadsby (1 pl.; 2 yrs.; Mult.) questions the winter hardiness. Finds the colour unattractive, calls it a 'one big show' he can do without. 'Circus' has never done anything for Mr. Clark (1 pl.; 4 yrs.; 18 in.) lack of bloom and quality of bloom being a serious fault. In Mr. Dufton's district (8 pls.; 2 yrs.; Can.) this rose had good growth, the attractive colour combination making it a fine bedder. Mr. Lawton (1 pl.; 4 yrs.; Mult.) complains as to the scarcity of bloom although the plant is healthy. Mrs. Morrison (1 pl.; 4 yrs.; Mult.) likes the cheery multi-coloured blooms even if the plant is not vigorous. For Mr. Parker (2 pls.; 4 yrs.; Mult., 24 in.) it was an attractive free-blooming bush. Blooms slightly fragrant. Mr. Selwood (1 pl.; 4 yrs.; Mult.) had improved flower production. With Mrs. Steinbergs on the Atlantic (2 pls.; 1 and 2 yrs.; Mult., 18 in.) it was a slow grower and while the plants were bushy in the fall, would like stronger growth. She admires the colour, however, bloom production even if not plentiful was long lasting without fading. Mr. Rhodes (2 pls.; 2 yrs.; Mult.) has lots of early good coloured bloom but sparse and washed-out in midsummer, then good again in October. It has a friend in Mrs. Wilson (1 pl.; 2 yrs.; Mult., 30 in.) who won prizes with this variety in six different shows this year. The bush is well formed having sturdy stems with glossy foliage and always in bloom. Bud attractive, full bloom beautiful.

CLARE GRAMMERSTORF, Fl. (Kordes '57). Mr. Buchanan (13 pls.; 1 and 2 yrs.; Can.) believes this is more the shrub type than a floribunda. Had 500 blooms on the plants the first part of the season, then they decided to 'climb' and reached a height of about 7 ft., after which they started to bloom again. Colour medium yellow tinged with pink—to Mr. Buchanan it is a wonderful sight loaded with bloom from bottom to top. Would recommend this rose to anyone.

CLEOPATRA, H.T. (Kordes '55). 'Well worth having,' is the comment of Mr. Anderson (2 pls.; 3 yrs.; Can., 24 in.); a scarlet and yellow bi-colour that did fairly well in a poor summer for roses. Mrs. Antoft (5 pls.; 1 yr.; Mult.) finds that though the plants are bushy and healthy, the blooms were rather small, more like floribundas, colour rather pale and on the whole not as good as 'Tzigane'. Mr. Buchanan (2 pls.; 1 yr.; Can.) lost his original plants last winter, calls it a good bi-colour. Ranks with 'Tzigane' and 'Saturnia' as the best of the bi-colours. Declares Mr. Bryans (4 pls.; 1 and 2 yrs.; Can. and Mult., 24 in.) 'plants have glossy foliage and are disease-resistant'. Flowers of scarlet and gold are of good size; however, petals seem to be a little short. Mrs. Gallagher (1 pl.; 1 yr.; Mult.) needs another year to judge its merits. For Mr. Parker (3 pls.; 1 and 2 yrs.; Mult., 27 in.) it is a

free-blooming bush with blooms of good form and substance with the foliage being healthy. He calls it a fine bedder. Mr. Stollery desires to wait and see – ends his remarks by saying ‘good but loose’.

CLIMBING ALAIN, Cl. Fl. (Roth ’57). Mr. Buchanan (1 pl.; 1 yr.; Can.) reports good growth on disease-resistant plant.

CLIMBING CHARLES GREGORY, Cl. H.T. Mr. Rhodes (1 pl.; 2 yrs.; Mult.) reports medium to strong climber. Deep red with gold base, a little bloom all summer with showing in November.

CLIMBING CHARLOTTE ARMSTRONG, Cl. H.T. For Mr. Rhodes (1 pl.; 2 yrs.; Mult.) this is a rampant grower, plenty of large pink blooms.

CLIMBING ENA HARKNESS, Cl. H.T. (Murrell ’54), ‘Warrants a trial where weather conditions permit’, says Mr. Mitchell (2 pls.; 1 and 2 yrs.; Can., 60 in.) foliage being identical with parent, bloom better and fairly continuous. Mr. Parker (1 pl.; 2 yrs.; Mult.) agreed and calls it one of the best climbing hybrid teas. In Victoria it was a rampant climber for Mr. Rhodes (1 pl.; 2 yrs.; Mult.) with plenty of bloom all summer and still in bloom at date of report.

CLIMBING FASHION, Cl. Fl. (Mattock ’56). Mr. Mitchell (2 pls.; 2 yrs.; Can., 60 in.) believes this class should receive more consideration, none lost in last year’s severe winter. Fairly vigorous plants with bloom larger than parent.

CLIMBING KARL WEINHAUSEN, Cl. Fl. Survived the frightful winter in Nova Scotia and has made good growth for Mr. Buchanan (2 pls.; 2 yrs.; Can., 7–8 ft.); had one burst of bloom in clusters of four to eight, the colour being dark but bright scarlet.

CLIMBING KORONA, Cl. Fl. (Kordes ’57). Mr. Buchanan (1 pl.; 2 yrs.; Can.) would like another year before passing judgment. Flowers are a good shade of red.

CLIMBING MOULIN ROUGE, Cl. Fl. (de Coninck-Dervaes). Mr. Buchanan (1 pl.; 1 yr.; Can., 6 ft.) had good growth; however, wants another year before passing ‘sentence’.

CLUB, Fl. (Gaujard ’57). ‘Have ordered more stock’, says Mr. Buchanan (2 pls.; 1 yr.; Can.), ‘as this seems to be a good variety’. Is a strong-growing bush with good single flowers that come out all over the bush. Colour scarlet.

COCKTAIL, S. (Meilland ’57). ‘This is a beauty that all should plant’, is the comment of Mr. Buchanan (2 pls.; 2 yrs.; Can.). Plant is covered first part of the season with small blossoms, colour of which is crimson with small yellow eye, yellow reverse. The specimen received by Mr. Butwick (1 pl.; 1 yr.; Mult. 18 in.) was rather scrawny. Plant put forth a slow but steady growth, foliage small but clean. Looking forward to next year’s report.

COLUMBINE, Fl. (S. Poulsen ’56). Mrs. Antoft (17 pls.; 1 yr.; Mult.) exclaims: ‘What a beautiful miniature “Peace” just more refined’. Blooms are carried in abundance on well-balanced bushes, being long lasting either on the bush or when cut. They are fragrant and excellent for arrangements. Mrs. Gallagher (1 pl.; 3 yrs.; Can.) agrees as to it being a good miniature ‘Peace’. Plant above average height. Mr. Parker (1 pl.; 2 yrs.; Can., 30 in.) mentions the ‘Peace’ colouring, attractive small H.T. bud, fair quantity of bloom that lasts well. Mr. Lawton (1 pl.; 1 yr.; Mult.) is not sold on it. Growth slow and bloom scarce even for the first year.

CONCERTO, Fl. (Meilland ’53). One of the best for Mr. Parker (2 pls.; 3 and 4 yrs.; Mult., 42 in.), strong spreading bush, numerous blooms of bright red on tall canes. Mr. Cadsby (2 pls.; 2 yrs.; Mult.) comments ‘a fine floribunda for those who like a brilliant red touch in the garden’. (*Last year for reporting this rose.*)

CONTENTMENT, H.T. (Boerner ’56). It would appear that neither of our reporters are contented with this one. Mr. Clark (1 pl.; 3 yrs.; 18 in.) comments little growth and few blooms and for Prof. MacAndrews (3 pls.; 3 yrs.; Mult., 20 in.) it was a poor grower, scant bloom with blooms too big for stem.

COUP DE FOUDRE, Fl. (Hemeray Aubert ’57). Mr. Mitchell (1 pl.; 1 yr.; Can., 20 in.) describes the colour of this variety as the brightest fiery red. The plant is upright with dark shiny foliage, the long bud opening flat. A real streak of lightning.

COYCOLLEEN, H.T. (McGredy '53). Mr. Parker (4 pls.; 5 yrs.; Mult.) is still in love with the little 'Irish Lady' reporting that the milk-white buds tinged with pink are entrancing. They open pure white—does not like rain, but what well-dressed girl does? On the other hand Mr. Bryans (1 pl.; 2 yrs.; Mult., 24 in.) is not impressed, says, 'No improvement over last year'. Buds lovely but flowers few in number. (*Last year for reporting this rose.*)

DANSE DU FEU, Cl. (Mallerin '53, J. & P.). Renamed in U.S.A. 'Spectacular'. Both Mr. Bryans (1 pl.; 1 yr.; Mult., 7 ft.) and Mr. Buchanan (4 pls.; 2 and 5 yrs.; Can.) agree that this is an excellent climber. Mr. Bryans comments on its good growth and disease-resistant foliage. A profuse bloomer, the colour sensational. Mr. Buchanan feels one more report is justified on this variety to show the hardness of the plant—quote: 'The bud (scion) on one of the plants as well as some of the roots were fully exposed last winter and they lived through the ordeal'.

DEBBIE LEE MARSH, Fl. (Marsh '58). Advising that it is a little early to evaluate the true potentials as yet. Mr. Butwick (1 pl.; 1 yr.; Mult., 12 in.) reports a delicate little double floribunda. Blooms of about thirty-five petals, the colour pink shades ageing to coral pink overtones.

DIAN, Min. (R. S. Moore '57). 'Very susceptible to Black Spot', says Mr. Clark, (1 pl.; 1 yr.; 4 in.).

DICKSON'S FLAME, Fl. (Dickson '58). In a year when most of her bushes were uninspired, Mrs. Baillie (2 pls.; 1 yr.; Mult.) found this to be the most interesting rose she had for a long time—buds lovely, the pure scarlet colour, refreshing. Blooms fade a bit in the hot summer. On the other hand, Mr. Buchanan (3 pls.; 1 yr.; Can.) had a very wet summer and he comments the colour stood out, and didn't seem to mind the constant rain. Possibly the brightest new colour in a floribunda. Needs another year for judgment. Mr. Westbrook's (1 pl.; 1 yr.; Can.) plant was late in getting established; agrees blooms definitely well named, is looking forward to this one next year. Mr. Mitchell (6 pls.; 1 yr.; Can., 36 in.) reports plants were vigorous, slightly branching with olive-green foliage—semi-double blooms of twelve petals—one complaint, could have more weight to petals. Mr. Norton expresses appreciation of the qualities of this rose except for presence of some Black Spot in October. It has not been prolific for Mr. Stollery; however, he states not established yet. The writer was delighted with the results he had (1 pl.; 1 yr.; Can., 30 in.), the colour of the blooms being eye-catching; like Mr. Westbrook am looking forward to next year.

DON JUAN, Cl. (Malandrone, J. & P. '58). Mrs. Marshall (1 pl.; 2 yrs.; Mult.) still likes this one. Colour is a rich dark red with velvety petals, buds attractive—open bloom holding colour well, slightly fragrant. Would recommend. Mr. Butwick (4 pls.; 1 yr. Huey, 5 ft.) is very enthusiastic about this variety stating it is proving to be one of the best deep red pillars. Strong growth with flowers that last from five to fifteen days and are quite fragrant; free bloomer; disease-resistant.

DORIS NORMAN, Fl. (Norman '58). Mr. Lawton (1 pl.; 1 yr.; Can.) reports nice healthy growth for first year, approves of the form and pleasing bright colour of the bloom, growth moderate. Mr. Westbrook's plant took all summer to get established, however, from what it showed in flame blooms gives great promise. The writer (1 pl.; 1 yr.; Can., 30 in.) agrees with Mr. Lawton, and I also found it to be Black Spot resistant. Should have a good future.

DOROTHY GOODWIN, H.T. (Goodwin '54). Mr. Parker's (1 pl.; 2 yrs.; Mult.) only comment: 'My plant is no different from "Peace".'

DORTMUND, R. Kor. (Kordes '55). Mr. Buchanan (1 pl.; 2 yrs.; Can.) and Mr. Selwood (1 pl.; 2 yrs.; Mult.) concur as to this being an excellent variety. Strong growth with 8 ft. flexible canes. 'Flowers are velvet blood-red in clusters which last for weeks on the plant', is the comment of Mr. Selwood. To Mr. Buchanan the foliage is holly-like, very attractive, and disease-resisting. He describes the colour as vivid scarlet, lit up by a prominent white eye.

DWARFKING, Min. (Kordes '57). Mr. Wilson (1 pl.; 2 yrs.; own root) finds that this variety has good plant habit with extremely long lasting dark red blooms which are star-shaped.

DUK AT, L.R. (Tantau '55). Mr. Buchanan's (1 pl.; 1 yr.; Can.) plant made good growth in its first year, flowers while rather scarce were a good deep yellow somewhat the same as 'Ethel Sanday' in colour and size. Needs another year before passing judgment.

DUO, Fl. (Gaujard '55). Mr. Buchanan (1 pl.; 1 yr.; Can.) describes the flower of this variety as resembling a 'Parrot Tulip', the colour a bright scarlet with light yellow reverse. Good grower with plenty of blooms for a first year plant, with the fault that form does not hold too long.

EDEN ROSE, H.T. (Meilland '50. Int. C.-P. '53). 'Not enthused with this rose', is the comment of Mr. Blakeney (1 pl.; 3 yrs.; Mult.). Growth being rather coarse and bloom not appealing. To the contrary it is one of the favourites of Mr. Bryans (3 pls.; 1, 2 and 3 yrs.; Mult., 36 in.); in his garden growth is tall and spreading, the foliage large with no disease. Blooms have lovely form and colour with the added attraction of fragrance. As his two older plants were still blooming 6 November he asks, 'what more can one ask'. Mrs. Gallagher (3 pls.; 3 yrs.; Can., tall) advises her plants bloom all summer, in all kinds of weather. A delightful red-pink old-fashioned rose. Mr. Parker (2 pls.; 4 yrs.; Mult., 5 ft.) is in agreement with Mr. Bryans. (*Last year for reporting this rose.*)

ELSINORE, Fl. (Lindquist. Int. Poulsen '57). For Mrs. Gallagher (2 pls.; 2 yrs.; Can.) this is a rather slow blooming plant of medium height. Blooms a striking red colour. Mr. Parker (3 pls.; 1 and 2 yrs.; Mult., 24 in.) regards this as an excellent variety with a little brighter red and larger bloom than 'Moulin Rouge'.

ENCORE, Fl. (Von Abrams '58). Mr. Selwood (1 pl.; 2 yrs.; Mult.) very vividly remarks, 'Colour too wishy washy, discarded'.

ETHEL SANDY, H.T. (Mee '54). Mr. Bryans (2 pls.; 2 yrs.; Can., 36 in.) admires the attractive colour—yellow shaded apricot—and the form of the blooms; however, comments that the foliage is inclined to be sparse. Mr. Cadsby (1 pl.; 1 yr.; Can.) likes this rose. In his garden it was a strong grower and profuse bloomer. For Mr. Dufton (2 pls.; 4 yrs.; Can.) it is an excellent exhibition variety having marvellous growth and foliage. It has one fault for Mr. Dufton which is listed by some other reporters—its colour—not so attractive in the autumn. It improved for Mrs. Gallagher (1 pl.; 3 yrs.; Can., med.) in the warm summer, specially good in July. Mr. Jubien (3 pls.; 2 yrs.; Can., 36 in.) liked this one well enough to have added three new plants this year. Mr. Norton (2 pls.; 3 yrs.; Can.) survived a severe winter in good condition. Produces a fair amount of bloom and has no diseased foliage. Mrs. Murdoch (3 pls.; 3 yrs.; Mult.) is enthusiastic about this rose, has three more on order, whispers that if well grown will give exhibition blooms. Her plants grow over 5 ft. with lovely bronze foliage, disease free. Slightly fragrant to boot. Mr. Rhodes (2 pls.; 2 and 3 yrs.; Can.) agrees that it is a strong grower, early and continuous bloomer with a tendency to have split centres, not opening too well in wet weather. Worth while concludes Mr. Selwood (1 pl.; 1 yr.; Mult.); some really good exhibition blooms, though a slow repeater. It is still a top rose for Mr. Westbrook (2 pls.; 3 and 5 yrs.; Can.), grows exceedingly tall and compact and covered with the finest foliage of them all. Winters well. The writer (3 pls.; 2, 3 and 4 yrs.; Can.) agrees as to the excellence of this rose. To me it is top notch.

EVE, H.T. (Gaujard '54). Mrs. Gallagher (2 pls.; 1 yr.; Mult.) admired 'Eve', beautiful in the yellow orange mingling of colour with a nice fragrance as a bonus. Mr. Mitchell (1 pl.; 2 yrs.; Can., 30 in.) advises that the habit of plant reminds him of 'Comtesse Vandal'. Upright growth with glossy foliage, bloom fairly large with good form, colour coral shaded yellow.

FANFARE, Fl. (Swim '56). Mrs. Steinbergs (1 pl.; 1 yr.; Mult., 30 in.) likes the good upright growth, and disease-free foliage with good clusters of bloom; however, she dislikes the colour. Mrs. Gallagher (3 pls.; 2 yrs.; Shaf., med.) advises it was generous with its rosy shaded yellow blooms. Mr. Bryans (1 pl.; 2 yrs.; Mult., 36 in.) concurs that it is a consistent bloomer, the flowers very bright with form a little below par. For Mr. Selwood (1 pl.; 2 yrs.; Mult.) it was vigorous with fine foliage. Mr. Clark (1 pl.; 4 yrs.; 33 in.) regards it as an excellent decorative rose and also agrees as to it being a prolific bloomer, also having fragrance.

FANTAN, H.T. (Meilland, C.-P., '58). Mr. Clark's (1 pl.; 1 yr.; 30 in.) plant is a tall compact grower; however, he is disappointed with the colour. Buds ugly like 'Diamond Jubilee', having none of the perfection of that rose when open. There are few blooms that are usable.

FASHIONETTE, Fl. (Boerner '55). More subdued in colour than 'Fashion', also daintier declares Mr. Clark (1 pl.; 1 yr.; 25 in.), his wife prizing the buds for corsage work. Healthy bush, compact and free blooming. Has slight fragrance. Mrs. Marshall (1 pl.; 2 yrs.; Mult.) is entirely in agreement with Mr. Clark.

FATA MORGANA, Fl. (Kordes). Mr. Mitchell (1 pl.; 1 yr.; Can., 24 in.) reports an upright plant with strong canes and having shiny leathery foliage. Large hybrid tea bud that opens semi-double. A bright orange-gold bi-colour.

FAUST, Fl. (Kordes '57). Mr. Anderson (2 pls.; 2 yrs.; Mult.) dislikes this one stating that for him the blooms had a disagreeable and unusual type of colouring. This is an outstanding rose, in every respect, and is definitely worthy of its N.R.S. Gold Medal, etc., is the report of Mr. Clark (2 pls.; 2 yrs.; Can. - 1 pl.; 1 yr.; Mult.). Tall vigorous plants, good deep green foliage, profuse bloomer with flowers beautiful form and colour. In complete agreement with this is Mr. Buchanan (6 pls.; 1 and 2 yrs.; Can.), who further states it is one of the hardiest floribundas in his garden, and while the flowers are of good hybrid tea form the plant is a true floribunda. He is increasing his stock. For Mr. Parker (1 pl.; 1 yr.; Mult., 36 in.) it did well in its first year. He notes, however, that while the early bloom was a good yellow it becomes piebald with pink later. Mr. Selwood (1 pl.; 1 yr.; Mult.) for first year quite promising. Mr. Stephenson (1 pl.; 2 yrs.; Can.) would like it better if it retained its yellow colour and did not change to pink, agrees as to its good growth habits. Mr. Stollery is on the side of Mr. Anderson. Evidently not a good rose for Southern Ontario.

FIRECRACKER, Fl. (Boerner, McGredy & Dickson '56). F. N. Parker (1 pl.; 2 yrs.; Can., 30 in.) reports a good variety but not outstanding. A good bushy plant with profuse bloom.

FIRE KING, Fl. (Meilland '59). 'A good strong upright grower that should be popular', is the comment of Mr. Buchanan (2 pls.; 1 yr.; Can.), 'has double flower borne in good-sized clusters the colour almost the same as "Gloria Mundi".' Mrs. Marshall (1 pl.; 1 yr.; Mult.) is not too satisfied with this variety. The plant seeming to send out a lot of single blooms. She advises that it is taller than most floribundas, being a fiery red. Would be suitable as a background of evergreens. Needs a little longer to prove what it can do.

FIRE OPAL, Fl. (Boerner, McGredy '55). Mr. Butwick (2 pls.; 3 yrs.; Can., 15 in.) reports hardy plants having a steady stream of orange-scarlet blooms on a low compact bush.

FIRST CHOICE, Fl. (Morse '58). The first year impressions of Mr. Buchanan (3 pls.; 1 yr.; Can.) is favourable. The flower is single vermilion orange in colour with a deep yellow centre. Strong but low grower, loaded with bloom all season.

FLAMMENTANZ, R. (Kordes '55). All our reporters—Mr. Anderson (1 pl.; 2 yrs.; Can., 7 ft.) Mr. Buchanan (3 pls.; 1 and 2 yrs.; Can.) and Mr. Butwick (1 pl.; 2 yrs.; Can., 5 ft.) are in agreement as to the desirability of this variety. Mr. Buchanan advising that all should try this plant, it being the strongest growing climber he had seen in recent years. Bloom is so heavy, the plant 'literally groans' under the weight; in this Mr. Butwick concurs. He enjoys the non-fading blooms which are semi-double and very long lasting. As a parting shot for those looking for a hardy climber Mr. Buchanan says—hardy without protection in Cape Breton.

FLASH, Fl. (Gaujard '57). Mr. Buchanan (2 pls.; 1 yr.; Can.) will report further next year as bushes were planted late. Colour light orange-scarlet, blooms semi-double.

FLORIDA VON SCHARBEUTZ, Fl. (Kordes '57). Mrs. Gallagher (1 pl.; 1 yr.; Mult., tall) comments—a nice bronzy yellow—too early to judge it.

FORT VANCOUVER, H.T. (Swim '56). Mr. Parker (1 pl.; 3 yrs.; Mult., 6 ft.) admires this variety, a tall upright grower with good foliage, free bloomer with some tremendous blooms. Fragrant. Mr. Rhodes (1 pl.; 3 yrs.; Mult.) agrees as to the excellence of this rose. A pink blend with good exhibition blooms.

FRED STREETER, H.T. (Kordes '55). Both Mr. Cadsby (1 pl.; 1 yr.; Can.) and Mrs. Gallagher (1 pl.; 1 yr.; Can., med.) state that this is a promising variety. To Mr. Buchanan (9 pls.; 1-2-4 yrs.; Can.) it is one of the best yellows in his garden being hardy and a good grower with clean disease-resisting foliage. Has fragrance, form and size.

FRUHLINGSCHNEE, S. (Kordes '54). Mr. Norton (1 pl.; 2 yrs.; Can.) is still not happy with this one, even if growth and bloom were better than previous year. Some Black Spot.

FUSILIER, Fl. (Morey '57). A bright spot in the garden are the sentiments of Mr. Jubien (1 pl.; 2 yrs.; Mult., 24 in.), Prof. MacAndrews (1 pl.; 2 yrs.; Mult., 30 in.), Mr. Selwood (1 pl.; 2 yrs.; Mult.) and Mr. Stephenson (1 pl.; 2 yrs.; Mult.); a strong healthy plant that blooms freely, colour a lively red that appeals. 'Fusilier' has not treated Mr. Clark (1 pl.; 2 yrs.; 18 in.) kindly, he had little growth and few blooms. The writer (3 pls.; 1 and 2 yrs.; Mult., 30 in.) agrees with the majority.

F. W. AYLESWORTH, H.T. (Robinson '54). Both Mr. Rhodes (1 pl.; 3 yrs.; Mult.) and Mr. Westbrook (2 pls.; 2-3 yrs.; Can.) had practically the same good things to say about this rose. Plant habit is upright and compact. Blooms are a good crimson that sparkle. The colour lasts well. Fragrant. Being a rather shy bloomer is its only drawback.

GAIL BORDEN, H.T. (J. & P. '57). Mr. Buchanan (4 pls.; 1 and 2 yrs.; Can.), Mr. Jubien (7 pls.; 1 and 2 yrs.; Mult., 30 in.), Mr. Palmer (2 pls.; 1 yr.; Mult.) and Mrs. Wilson (1 pl.; 1 yr.; Mult., 36 in.) are in agreement as to this variety having exhibition blooms. Mrs. Wilson finds this is a well-formed bush with sturdy stem. The heavy dark green foliage adds to the attractiveness of this rose. For Mr. Buchanan the bloom holds its shape for days while the colour also stays. 'Should be in every garden,' comments both Mr. Buchanan and Mr. Jubien. Mrs. Marshall (1 pl.; 2 yrs.; Can.) is willing to go along with other enthusiasts; however, does not think it will be an outstanding exhibition rose. She admires the lovely colouring while admitting it should make a nice exhibition variety. Mr. Clark (1 pl.; 1 yr.; 32 in.) notes it is inclined to ball in wet weather. Mr. Dufton (2 pls.; 2 yrs.; Mult.) is not excited, blooms too loose. Mr. Haslett (1 pl.; 1 yr.; Mult., 15 in.) has only average growth with blooms of beautiful form and colour, some fragrance. Prof. MacAndrews (3 pls.; 2 yrs.; Mult., 24 in.) advises that it has a weak constitution. Mr. Selwood (1 pl.; 1 yr.; Mult.) approves the vigorous growth and good foliage though not very free flowering. The writer (2 pls.; 1 and 2 yrs.; Mult., 30 in.) is in accord with Mr. Selwood. Its colour rose red with undertones of yellow is striking, a good variety for any garden.

GARDEN PARTY, H.T. (Armstrong Nurseries '59). Did little for Mr. Cadsby (1 pl.; 1 yr.; Mult.) in its first year. Observed mammoth blooms of fine exhibition quality and hopes it will do equally well in the East. 'It seemed quite at home in my garden,' is the observation of Mrs. Marshall (1 pl.; 1 yr.; Shaf.) the creamy white blooms edged with pink were beautiful. Foliage vigorous and disease-resistant. 'Disappointing for an A.A.R.S. award winner', comments Prof. MacAndrews (1 pl.; 1 yr.; Mult.), 'can be nice but not consistent'. It grew well for Mr. Stephenson (1 pl.; 1 yr.; Shaf.), good blooms size of 'Peace'. Believes it will be a favourite when well known.

GERTRUDE GREGORY, H.T. (Gregory '57). 'This would answer Mr. Webster's search for a good yellow,' advises Mr. Buchanan (6 pls.; 1 and 2 yrs.; Can.); he applauds its robust growth, clean foliage, fine form of the blooms and its hardiness. Mr. Dufton (5 pls.; 1 and 2 yrs.; Can.) is in entire agreement.

GLADIATOR, L. C. (Malandrone. Int. J. & P. '55). Mr. Cadsby (1 pl.; 3 yrs.; Mult.) finds the colour harsh, good growth but not entirely winter hardy. For Mr. Clark (1 pl.; 4 yrs.; 36 in.) the plant was frozen back to the ground, and was slow to start in spring; observes bloom had good form and colour. Mrs. Marshall thinks this a terrific climber with stunning blooms in spite of the plant not making much growth. Mr. Selwood (1 pl.; 2 yrs.; Mult.) reports hybrid tea type of bloom light to medium red lasts well on the plant. At the head of the lakes it freezes to the ground for Mr. Westbrook (1 pl.; 3 yrs.; Mult.); the colour is crimson and pleasing to the eye. Blooms of good form.

GLETCHER, Fl. (Kordes '55). Mr. Butwick (2 pls.; 1 yr.; Mult., 15 in.) describes the colour of the blooms as 'Lavender', are long lasting and he considers it to be one of the best in this new colour break. Mr. Palmer (1 pl.; 1 yr.; Mult., 24 in.) reports a very good bloomer that holds its colour well.

GOLD CUP, Fl. (Boerner '57). Mr. Buchanan (9 pls.; 1 and 2 yrs.; Can.) would like another year to judge this one properly. He admits it is a good floribunda with the plant in bloom all season. The bloom habit, however, was not entirely satisfactory. A disappointment to Mr. Clark (1 pl.; 2 yrs.; 16 in.); little growth, few flowers, but the colour of those few was good. Mr. Selwood (1 pl.; 1 yr.; Mult.) is hoping for better results next year, had good growth and bloom colour—very stingy with bloom.

GOLDEN FLEECE, Fl. (Boerner '55). Mr. Buchanan (3 pls.; 1 yr.; Can.) is sorry he had ordered it. Mr. Clark (1 pl.; 4 yrs.; 13 in.) reports it did not winter well, and while it is the only rose with flowers of soft yellow the bloom is scarce and foliage Black Spots. Mr. Parker (1 pl.; 3 yrs.; Mult.), if he needed space, would discard. For Mrs. Wilson (1 pl.; 1 yr.; Mult., 24 in.) the bush was not too vigorous and the medium yellow blooms seemed to lack form and substance.

GOLDEN MASTERPIECE, H. T. (Boerner '54). Mr. Cadsby (1 pl.; 3 yrs.; Mult.) and Mr. Westbrook (2 pls.; 3 and 5 yrs.; Mult.) wish they had the courage to discard this one, only the fact that every so often it has a beautiful deep yellow exhibition bloom that earns it a reprieve. Mr. Clark (1 pl.; 4 yrs.; 39 in.) has a disease-free upright bush with too few flowers. Buds are beautiful but open into floppy flowers. Mr. Jubien (3 pls.; 1 yr.; Can., 24 in.) is pleased with the first year results. It did survive the winter, advises Mrs. MacDonald (1 pl.; 2 yrs.; Mult., 30 in.), contrary to the expectations of her friends in the East. While it had a slow start it became a strong healthy bush. Blooms not as plentiful as hoped for, they were, however, large and well shaped, the colour lovely. Some fragrance. Mr. Parker (2 pls.; 5 yrs.; Mult., 40 in.) would discard if he needed the space.

GOLDEN SHOWERS, L. C. (Lammerts '56). Mrs. Baillie (1 pl.; 3 yrs.; Mult.), Mr. Clark (1 pl.; 3 yrs.; 22 in.) and Mrs. Marshall (1 pl.; 4 yrs.; Mult.) are wondering how this rose obtained its A.A.R.S. rating. Mrs. Baillie comments: 'Why do I keep it?' It frustrates Mrs. Marshall, it just won't do anything for her. Mr. Clark will keep it one more year just in case. Mr. Cadsby lost his plants by winter-kill. Thinks it would be a good pillar for those living south of the Mason-Dixon line. Mrs. Meiklejohn (1 pl.; 3 yrs.; Mult.) is very pleased with this one. While the growth is not more than six feet it has glossy clean foliage, flowers of a bright yellow and it blooms all summer—needs a sheltered location. For Mr. Parker after three years died—no regrets. Mr. Selwood (1 pl.; 1 yr.; Mult.) comments: 'Worth growing for the beautiful buds and foliage. I like it.' Suffers so severely from winter in Port Arthur that Mr. Westbrook (2 pl.; 2 and 3 yrs.; Mult.) decides it is unfair to judge its growth. The writer (1 pl.; 2 yrs.; Mult.) will discard if there is no improvement this year.

GOLDEN SUN, H. T. (Golden Sonne in Germany.) (Kordes '57). This variety has surprised Mr. Buchanan (9 pls.; 1 and 2 yrs.; Can., 30 in.) as to its hardiness. Good deep yellow blooms on an excellent plant. Mr. Anderson (3 pls.; 2 yrs.; Can.) has wishful hopes for more blooms next year, is fond of the individual yellow bloom. Mr. Westbrook (1 pl.; 1 yr.; Can.) is withholding judgment for another year.

GOLDEN WINGS, H. T. (Shepperd '56). Mr. Cadsby (1 pl.; 1 yr.; Mult.), Mr. Clark (1 pl.; 1 yr.; 32 in.) and the writer (2 pls.; 1 yr.; Mult., 40 in.) all agree as to the vigorous growth of this variety and also as to its profuse bloom. This is a single yellow in colour. The writer's plants were disease free.

GOLD MARIE, Fl. (Kordes '58). Mr. Buchanan (3 pls.; 1 yr.; Can.) is well satisfied with this one. A tall growing plant with plenty of good deep golden yellow blooms with a pink shading. Clusters were fairly large and the plant constantly in bloom.

GRACE DE MONACO, H. T. (Meilland '56). Mr. Buchanan's bush (1 pl.; 1 yr.; Can.) was planted late therefore not much growth. The few flowers he had were a large size and good form. Fragrant. Needs another year for appraisal. Mr. Billington (1 pl.; 2 yrs.; Mult., 36 in.) is not impressed. Plant did not develop as anticipated, bloom sparse

with poor foliage out of colour. Mr. Dufton (1 pl.; 3 yrs.; Mult.) is charmed by the lady, comments really outstanding this season, giving some of the finest blooms in the garden. Mr. Haslett's plant (1 pl.; 2 yrs.; Mult., 15 in.) improved in its second year. Blooms large and beautiful but short on quantity.

GRAND GALA, H.T. (Meilland '54). Mr. Billington's plant (1 pl.; 2 yrs.; Mult., 36 in.) did not perform well, growth slow and not up to par. The foliage suffering due to dry hot weather. Mr. Dufton (1 pl.; 3 yrs.; Can.) reports vigorous growth. A fine bi-colour—if you like the colour combination. Mr. Mitchell (1 pl.; 2 yrs.; Can., 30 in.) agrees as to the vigorous growth. Globular bud opens to a large flower, red with misty white reverse, being fairly free. Mr. Parker (3 pls.; 1 and 3 yrs.; Mult., 36 in.) calls the colour striking, bloom fairly prolific; however, for him the foliage was poor. 'The flower is devoid of personality,' is the comment of Mr. Selwood (1 pl.; 1 yr.; Mult.)

GREEN FIRE, Fl. (Swim '58). Mr. Clark (1 pl.; 1 yr.; 35 in.) is enthusiastic about this one. Advises the plant is healthy, free of disease and a very prolific bloomer. Suggests the tiny buds which glow should be ideal for miniature arrangements. He recommends to any one who like the colour—greenish yellow. Mrs. Naismith (2 pls.; 1 yr.; Mult.) is not satisfied with the behaviour of this rose therefore intends to discard. Had poor foliage and colour, fades fast. Mr. Selwood (1 pl.; 1 yr.; Mult.) also states its colour fades, and while it makes a good early show, there is no bloom for long periods.

GRISBI, H.T. (Meilland '56. Int. U.S.A. by C.-P. '58) name in United States—'Sunlight'. Mr. Haslett (2 pls.; 2 yrs.; Mult.) reports this one has disease-resistant foliage with flowers of a good strong colour, but only a fair bloomer. For Prof. MacAndrews (1 pl.; 1 yr.; 30 in.) it was 'just another rose'.

HAMBURGER PHOENIX, R. Kor. (Kordes '54). For Mr. Buchanan (1 pl.; 1 yr.; Can.) it was a tall grower, reached 8 ft. in first year. No flowers. Mr. Butwick (1 pl.; 2 yrs.; Can., 5 ft.) comments it looked promising, now considers it second rate, froze back to bud union in winter. Mr. Selwood (1 pl.; 2 yrs.; Mult.) reports healthy foliage with flowers of fiery red, but not enough to make a real showing.

HEAT WAVE, Fl. (Swim '58). Mr. Clark (1 pl.; 1 yr.; 37 in.) and Mr. Selwood (1 pl.; 1 yr.; Mult.) report a vigorous plant with good foliage and form with colour of flower eye-catching, rather a stingy bloomer. 'One of the best of the new roses,' is the comment of Mrs. Naismith (2 pls.; 1 yr.; Mult., 36 in.). Has blooms like a 'Camellia'.

HENRI MALLERIN, H.T. (Mallerin '53). Regarded as a worthwhile garden yellow by Mr. Selwood (1 pl.; 2 yrs.; Mult.), a good plant and foliage, to which I am in agreement (2 pls.; 1 yr.; Can., 33 in.).

HENRY FORD, H.T. (Howard '54). Mr. Bryans (1 pl.; 1 yr.; Mult.) reports low growth with foliage that seems satisfactory. Blooms are attractive, large and a shrimp-pink colour.

HENRY MORSE, Fl. (Kordes '58). Mr. Buchanan (3 pls.; 1 yr.; Can., 46 in.) proclaims this a good new variety. Tall, strong growing plant. Blooms are crimson, the colour holding till the petals drop. In bloom all season in clusters.

HIGHLIGHT, Fl. (Robinson '57). Mr. Parker (3 pls.; 1 and 3 yrs.; Can. and Mult., 27 in.) regards this as an outstanding floribunda. Bushy plant with blooms of very vivid scarlet, excellent for cutting. A profuse bloomer. One of Mr. Buchanan's plants (1 pl.; 2 yrs.; Can.) succumbed to the winter. Growth for him was uneven, somewhat in the nature of 'Charles Mallerin'. Needs another year for true analysis.

ICEBERG, Fl. (Kordes. Int. McGredy '58). 'I was very impressed,' states Mrs. Baillie (1 pl.; 1 yr.; Mult.). A lovely pure white bloom on a plant free flowering and bushy. Not too much growth in first year. Mr. Cadsby's (1 pl.; 1 yr.; Can.) expectations are great. His plant tall growing, a wonderful new white. Mrs. Marshall (1 pl.; 1 yr.; Can.) enthusiastically recommends this rose. Foliage very green and waxy—very attractive. Always in bloom since mid-summer. Mr. Norton (1 pl.; 1 yr.; Can.) is more cautious, had air growth and bloom production with Black Spot. Looks for better results next year.

ISOBEL HARKNESS, H.T. (Norman '57). Mr. Selwood (1 pl.; 2 yrs.; Mult.) in substance expresses the opinions of Mr. Bryans (1 pl.; 1 yr.; Mult., 42 in.), Mr. Buchanan (3 pls.; 1 yr.; Can.), Mr. Clark (2 pls.; 1 and 2 yrs.; 30 in.), Mrs. Gallagher (1 pl.; 2 yrs.; Can., med.), Mr. Jubien (1 pl.; 2 yrs.; Mult., 24 in.), Mr. Westbrook (1 pl.; 2 yrs.; Can.) and the writer (3 pls.; 1 and 2 yrs.; Can., 33 in.) when he reports a strong grower with healthy foliage, good colour, *not enough petals*, excellent garden variety but not good for exhibition. The majority reported colour deep golden yellow. On the contrary this rose did not excite Mr. Cadsby (1 pl.; 1 yr.; Can.) or Mr. Dufton (6 pls.; 2 and 3 yrs.; Mult. and Can.), who mentioned that the blooms are loose. Prof. MacAndrews (2 pls.; 2 yrs.; Mult., 20 in.), Mrs. Naismith (2 pls.; Mult., 24 in.) and Mr. Parker (1 pl.; 2 yrs.; Mult., 30 in.) were disappointed. Mrs. Naismith said the colour was poor. Mr. Parker, however, reported good yellow colour but blooms thin and short lived. Mr. Palmer (2 pls.; 1 yr.; Mult.) comments: 'Poor colour and form, intend to discard.' Summing up—the same girl or same rose does not appeal to all.

IVORY FASHION, Fl. (Boerner '58). 'Another well-named rose' is the comment of Mr. Clark (1 pl.; 1 yr.; 21 in.); his compact bush was quite disease-resistant. Bud form perfect but they open too rapidly to rather droopy-looking flowers. Mr. Jubien (1 pl.; 1 yr.; Mult., 20 in.) likes the ivory-coloured blooms but complains about the production. 'We mean to have more of this variety next spring,' states Mrs. Marshall. Her plant has healthy attractive foliage and the bloom stays fresh for days. Prof. MacAndrews (2 pls.; 2 yrs.; Mult., 30 in.) advises that this rose is well worth growing but needs feeding and water. To Mr. Norton (8 pls.; 1 yr.; Can.) only one plant made early satisfactory growth; however, augurs well for its future. Black Spots. Mr. Palmer (2 pls.; 1 yr.; Mult., 24 in.) likes the plant and the bloom. It is, he states, super for arrangements but Black Spots badly. Mr. Selwood (1 pl.; 1 yr.; Mult.) is in practical agreement on its merits. Mr. Butwick's (1 pl.; 1 yr.; Huey, 12 in.) plant proved to be very poor, not sold on this variety. It did grow well for Mr. Cadsby (1 pl.; 1 yr.; Can.) and had scanty bloom. For Mrs. Naismith (2 pls.; 1 yr.; Mult.) it is lovely for arrangements but otherwise she is not enthusiastic. Seems to be prone to Black Spot.

JEANIE, H.T. (Eddie '59). Mr. Clark (1 pl.; 1 yr.; 21 in.) reports a tall, branching plant that needs plenty of room. Colour of bloom a nice blend of cream, pink and yellow, form being very poor. Foliage not good and is subject to Mildew. He thinks it a shame a free bloomer like this cannot have more to recommend it.

JIMINY CRICKET, Fl. (Boerner '54). Mrs. Antoft (6 pls.; 1 yr.; Mult.) reports low-growing plants, she prefers it to 'Masquerade'. Fall colours were especially lovely. 'Definitely one of the better floribundas,' comments Mr. Bryans (2 pls.; 1 and 2 yrs.; Mult., 30 in.). Good foliage, fair disease-resistance, bloom attractive colour with marked fragrance. Mr. Billington (1 pl.; 1 yr.; Mult., 36 in.) has mixed emotions on this one. For Mr. Blakeney (1 pl.; 4 yrs.; Mult., 36 in.) it is a very vigorous plant, well branched and shapely, and although it has plenty of blooms of good colour it fails to entirely satisfy. To Mrs. Gallagher (1 pl.; 4 yrs.; Shaf., tall) it is 'always a lively piece in its tangerine-red blooms'. Prof. MacAndrews (3 pls.; 4 yrs.; Mult., 30 in.) is not entirely satisfied. He liked the colour, a lively orange blend but flowers were too thin. Had weak stems and is a bad Black Spotter. Mr. Parker (3 pls.; 5 yrs.; Mult., 36 in.) reports a good growing free blooming variety with excellent foliage. 'It is worthwhile if you have lots of room,' states Mr. Selwood (1 pl.; 3 yrs.; Mult.). Not a good mid-summer flower, is the opinion of Mr. Schram (2 pls.; 3 yrs.; Mult.) and while the growth and foliage are good, it is nothing to get excited about.

JOSEPHINE BRUCE, H.T. (Bees '49. Int. Totty '53). I like the sentiments of Mr. Bryans (4 pls.; 1, 2 and 3 yrs.; Mult.) in writing about this rose: "'The dark lady of the sonnets" clad in crimson velvet! The most admired rose in my garden. Fickle?—not Jo! She is a model for consistency—always in flower and always beautiful.' 'My favourite crimson red,' is the comment of Mr. Blakeney (1 pl.; 2 yrs.; Can.); only fault, plant's sprawling habit. Again on the Pacific Coast, Mr. Rhodes (3 pls.; 1–2–3 yrs.; Mult.) calls it the best and none in her colour to equal her even with all 'Josephine's' faults. Mr. Parker (4 pls.; 3 and 4 yrs.; Mult.) echoes the general sentiments but whispers that there is a little Mildew in hot weather and that she withholds her fragrance in his garden. On the east coast, Mrs. Antoft (4 pls.; 1 yr.; Mult.) is also enthusiastic about this rose. She writes: 'This dark red almost black rose is of magnificent beauty, much admired.' Contrary to many other

reports her bushes were quite upright. Mr. Lawton (1 pl.; 2 yrs.; Mult.) has a healthy plant but very low-growing and spreading. Would like more bloom. Mr. Westbrook (4 pls.; 1-3 yrs.; Can.) agrees as to the sprawling habit, but advises all is forgiven once the blooms come. For him it is a beautiful crimson and black bloom with a rich fragrance. He is again increasing stock. (*Last year for reporting this rose.*)

JUNE BRIDE, Gr. (Shepherd '57). Mr. Clark (1 pl.; 3 yrs.; 21 in.) reports this variety has beautifully formed cream-white blooms borne in clusters. Bloom production equal to average hybrid teas.

JUNE OPIE, Fl. (Kordes '58). Mr. Buchanan's (2 pls.; 1 yr.; Can.) bush was planted late. It seems to be a good bedding plant as the growth is even. Colour is cherry pink shaded orange.

KARLSRUHE, R. Kor. (Kordes '57). There was not much bloom for Mr. Anderson (1 pl.; 2 yrs.; Can.) this year, flowers are large and rose-coloured. This variety appears to dislike hot weather as growth was better in fall. Mr. Buchanan (1 pl.; 1 yr.; Can.) had good growth up to 8 ft., no bloom. It bloomed for Mr. Bryans (1 pl.; 1 yr.; Can.) with fragrance moderate but delicate. It had three cycles of bloom in clusters of five to eight. It has one serious fault, too few laterals.

KASSEL, L. C. (Kordes '57). Mrs. Baillie (1 pl.; 1 yr.) did not have much growth as bush was planted late. 'Will make a dandy hedge, is Mr. Buchanan's (1 pl.; 2 yrs.; Can.) comment on this variety. Plant hardy and in bloom all summer, flowers very good colour, a light brilliant red. Is increasing his planting. Mrs. Gallagher (1 pl.; 1 yr.; Can.) reports excellent growth for first year. Small light buds of orange red opening to pink-red blooms.

KISS OF FIRE, H. T. (Marsh '59). Mr. Butwick (1 pl.; 1 yr.; Mult., 36 in.) reports a plant with strong necks and disease-resistant foliage. While blooms not plentiful they make a striking colour. A blend rose of orange with pink and mauve tints.

KOLN AM RHINE, R. Kor. (Kordes '56). Mr. Butwick (1 pl.; 1 yr.; 5 ft.) designates this as a second-rate climber. Semi-double deep-pink blooms. Plant vigorous.

KONRAD ADENAUER, H. T. (Tantau '55). Mr. Billington (4 pls.; 1 yr.; Mult., 30 in.) was disappointed in the development of his plants, the growth has been slow with niggardly bloom. Mr. Dufton (2 pls.; 2 yrs.; Can.) admits that while this is a fragrant crimson rose, he is not fond of the globular shape of the bloom. It is a good strong growing plant for Mr. Jubien (1 pl.; 2 yrs.; Mult., 30 in.). Prof. MacAndrews' (2 pls.; 2 yrs.; Mult., 30 in.) brief comment is, 'just another dark red, others I like better'. Mr. Selwood (1 pl.; 2 yrs.; Mult.) reports a bushy branching plant that produces a reasonable number of good blooms, occasionally a real fine exhibition bloom. Mr. Westbrook (1 pl.; 2 yrs.; Can.) likes this rose, it produces good crimson blooms with fragrance, grown on long stems from a vigorous sturdy bush. 'What more can one ask for?'

KORDES PERFECTA, H. T. (Kordes '57. Int. J. & P. '58). 'Growth slow and not many blooms,' was voiced by Mr. Anderson (4 pls.; 2 yrs.; Can.). 'Magnificent with outstanding growth and foliage,' is the view of Mr. Billington (4 pls.; 1 yr.; Mult., 36 in.). Blooms superb in form and substance; the ability of the cut blooms to stay in shape was amazing. Flowers had fragrance. 'Perfecta' means perfect and it is! for Mr. Bryans (4 pls.; 1 and 2 yrs.; Mult. and Can., 36 in.); sturdy plants that bloom steadily from early summer until Jack Frost nips. Has ordered two more for next year. It is not a wet season rose, advises Mr. Buchanan (9 pls.; 1 and 2 yrs.; Can.); has yet to see a bloom unmarred by rain. A disappointment to date. Mrs. Cadsby (2 pls.; 1 yr.; Can.) thinks this rose has been over-sold. Absolutely the most beautiful rose, excellent exhibition variety—has two trophies to prove it, is the report of Mr. Clark (4 pls. 1 yr.; 40 in.); while bud is ugly the bloom opens up in a blend of colours with a beauty of form nearing perfection. 'Get out the crying towels,' says Mr. Dufton (6 pls.; 2 yrs.; Can.), 'this one leaves me cold.' Mrs. Gallagher (4 pls.; 1 yr.; Mult., tall) is still undecided; however, believes that it will be good when well established. Mr. Lawton (1 pl.; 1 yr.) likes the colour and shape of bloom but wants to wait another year before passing judgment. Mrs. MacDonald (1 pl.; 1 yr.; Can., 30 in.) enjoyed this rose. Strong healthy growth with dark green glossy leaves. The blooms looking attractive for a very long time regardless of weather. 'Tops with me, is the comment of Prof. MacAndrews (6 pls.; 2 yrs.; Mult., 30 in.), 'very sturdy bush, long lasting flower and

very weather resistant.' Mr. Mitchell (14 pls.; 1 and 2 yrs.; Can., 32 in.) has this to say: 'Upright growth—disappointing bud—opening to finest exhibition bloom—hardy—no winter loss.' Plant made slow growth for Mrs. Morrison (1 pl.; 1 yr.; Mult.); however, blooms were spectacular, calls it a rose of great promise. Mrs. Murdoch (7 pls.; 2 yrs.; Mult.) aptly echoes the sentiments of many contributors by the following observation: 'If "Perfecta" had a pleasing bud I am sure it would join the Hall of Fame in Rosedom. So many roses look alike, this one being unusual is in a class alone.' Mr. Norton (4 pls.; 2 yrs.; Can.) is still looking for a worthwhile bloom. His plants wintered well and are disease free. Mrs. Meiklejohn (1 pl.; 1 yr.; Can.) is a booster for this rose advising colour most pleasing in hot weather. For Mr. Parker on Vancouver Island (7 pls.; 1 and 2 yrs.; Can. and Mult., 42 in.) his imported plant on Canina did not do much: however, his six maidens on Multiflora did very well all season with fragrant blooms 'not cabbagey like "Peace";' and as a final shot 'well named, comes as near perfection as a rose can'. Mr. Palmer (2 pls.; 1 yr.; Mult., 36 in.), while not very keen on the colour, calls it an excellent exhibition rose. At its best it is magnificent, form and foliage being perfection, is the considered opinion of Mr. Selwood (1 pl.; 2 yrs.; Mult.). The colour scheme either favourably impresses or unfavourably distresses. Easily grown. 'I am satisfied,' declares Mr. Stollery (1 pl.; 1 yr.; Can.). It was nicknamed 'The Sugar-Stick'. Nice fragrance. (*In the writer's opinion a controversial rose.*)

KORONA, Fl. (Kordes '55). Mr. Bryans (1 pl.; 1 yr.; Mult., 36 in.) considers this variety another tribute to the efficiency and genius of Herr Kordes. Strong vigorous growth, plenty of good foliage and flowers by the dozens. Colour scintillating orange red. For Mr. Butwick (1 pl.; 3 yrs.; Can., 48 in.) the blooms looked good, badly winter-killed. Mr. Cadsby (1 pl.; 1 yr.; Can.) advises it showed promise. Growth rather slow for Mr. Lawton (1 pl.; 1 yr.; Can.). Had few blooms of good colour on a healthy bush. Needs another year before passing judgment. 'About the best of the orange shades,' is the enthusiastic comment of Mrs. Naismith (2 pls.; 1 yr.; 36 in.); very free bloomer with good foliage. Mr. Parker (1 pl.; 2 yrs.; Mult., 48 in.). Tall plant with good foliage very free blooming. One plant of this variety is not enough.

LADY ELGIN, H. T. (Thais in Europe) (Meilland '54. Int. C.-P. '57). Mrs. Wilson (1 pl.; 3 yrs.; Mult., 42 in.) describes this to be a beautiful rose of real golden yellow which holds colour well. 'Mildews if neglected,' comments Mr. Selwood (1 pl.; 1 yr.; Mult.), 'otherwise a tall vigorous grower with exhibition type bloom, which is a beautiful orange-apricot colour.' 'A worthwhile rose,' proclaims Mrs. Murdoch (2 pls.; 2 yrs.; Mult.), 'that grows to 6 ft. in Vancouver. Quite a bushy and healthy plant.' This was a disappointment for Prof. MacAndrews (3 pls.; 2 yrs.; Mult., 24 in.), plants had weak growth, weak stems and scanty bloom. For the first time since obtaining this rose it has had a fairly good year, reports Mr. Lawton (1 pl.; 4 yrs.; Mult.); he likes the bloom that has a nice shape and good colour. If I could only get more! Mr. Dufton (2 pls.; 2 yrs.; Can.) believes the vigorous growth and lovely shade of light orange should recommend it. Did not survive the winter for Mr. Clark (1 pl.; 2 yrs.), had too few blooms, and as it was susceptible to Black Spot will not replace. This variety does not entirely satisfy Mr. Bryans (1 pl.; 2 yrs.; Mult., 45 in.), has tall rather straggly growth with foliage on the sparse side. Not a free bloomer but the blooms are beautiful.

LADY MAYSIE ROBINSON, H. T. (Kordes '56). Mr. Norton (1 pl.; 3 yrs.; Can.) reports growth good with bloom production increasing. Blooms outstanding but do not last.

LA JOLLA, H. T. (Swim '54). Mr. Selwood (1 pl.; 3 yrs.; Mult.) describes this variety as being best in spring and fall. Blooms are a pleasing colour that fade in hot weather, has fairly good form. Some fragrance. Mr. Clark (2 pls.; 2-3 and 4 yrs.; 35 in.) has tall compact bushes, disease free. Excellent decorative variety, lovely for arrangements. Sometimes stems are weak. For Mr. Haslett (2 pls.; 3 yrs.; Mult., 28 in.) this rose has improved with age. Foliage is dark and Black Spot resistant. Mr. Jubien (1 pl.; 4 yrs.; Mult.; 36 in.) reports that it did better this year. Prof. MacAndrews (3 pls.; 4 yrs.; Mult., 30 in.) is not too happy with this one, the blooms balled and faded and plants weakened with age. Mrs. Morrison (1 pl.; 3 yrs.; Mult.) is fond of this rose, has fine large blooms in soft pink with deeper veining on a sturdy bush. Some Black Spot. Grows well for Mrs. Wilson (2 pls.; 2 yrs.; Mult., 42 in.). Very upright growth producing exhibition blooms on long stems.

LAMPION, Fl. (Tantau '57). Mr. Norton (2 pls.; 2 yrs.; Can.) advises, my regard for this rose increases.

LAVENDER GIRL, Fl. (Meilland. Int. C.-P. '58). Mr. Butwick (1 pl.; 1 yr.; Mult., 12 in.) reports this variety behaves like a hybrid tea. Lavender-coloured blooms are roughly 2 to 3 in. in diameter and are rather long lasting. Plant quite bushy, foliage average, Black Spot resistant.

LEMON CHIFFON, H.T. (R. S. Moore '54). The variety has become better each year for Mr. Clark (1 pl.; 4 yrs.; 26 in.). Buds are a clear yellow having good form. Plant low and sprawling—quite disease-resistant.

LEVERKUSEN, R. Kor. (Kordes '54). Mr. Blakeney (1 pl.; 2 yrs.; Mult.) advises this variety hardy in Vancouver. Has pliant growth. 'Typical "Kordesii" habit,' is the comment of Mr. Selwood (1 pl.; 2 yrs.; Mult.). Blooms maize yellow.

LIGHTERLOH, S. (Tantau '55). Mrs. Gallagher (1 pl.; 1 yr.; Can.) reports that her plant grew to 3 ft. with many pretty scarlet blooms.

LILAC TIME, H.T. (McGredy '56). 'This rose is definitely true to its name—it is Lilac,' enthuses Mr. Bryans (1 pl.; 1 yr.; Mult., 33 in.). Strong plant of bushy growth, medium height with flowers of good form—keep well when cut. Fragrance good. Mr. Gadsby (1 pl.; 1 yr.; Can.) reports that while not a vigorous grower, blooms have quite a pleasant lilac shade. It has done better this year for Mr. Parker (2 pls.; 3 yrs.; Can., 24 in.), the blooms being more double and fragrant. Growth habit is spreading. The wood being small, plenty of bloom.

LILAC TIME, Min. (R. S. Moore '55). This is a miniature that Mr. Wilson (1 pl.; 2 yrs.; own root, 10 in.) is very fond of, the bloom colour is a varying shade of rose to lilac pink, very effective on the plant. Petite foliage.

LILIBET, Fl. (Lindquist '53). At both coasts, Atlantic and Pacific, Mrs. Steinbergs (3 pls.; 2 yrs.; Mult.) and Mr. Rhodes (1 pl.; 4 yrs.; Mult.) are in agreement as to this being their favourite pink floribunda. For Mrs. Steinbergs it is a low but strong grower having disease-free foliage and very floriferous. Buds are beautiful, the blooms long-lasting and fragrant. The only fault this rose has for Mr. Bryans is that in damp muggy weather it occasionally spots. Mr. Selwood (5 pls.; 4 and 5 yrs.; Mult. and Huey) states that in his opinion is among the ten best floribundas, especially on the Pacific coast. 'Lilibet' did real well for herself this season, is the report of Mr. Lawton (1 pl.; 6 yrs.; Mult.); plant bright and healthy with lots of nice bloom. Mrs. Gallagher's (1 pl.; 5 yrs.; med.) terse comment is, 'Dainty, pretty when it blooms.' (*Last year for reporting this rose.*)

LITTLE BUCKAROO, Min. (R. S. Moore '56). Mr. Clark's (1 pl.; 1 yr.; 4 in.) plant had Black Spot when received. Will wait for another year to judge properly. Bloom, foliage and plant growth are all a little large for a miniature, reports Mr. Wilson (1 pl.; 2 yrs.; own root). Semi-double red with white eye—colour especially brilliant.

LITTLE DARLING, Fl. (Duehrsen '56). This rose has won the approval of all our reporters. Mr. Bryans (1 pl.; 1 yr.; Mult., 33 in.), Mrs. Marshall (1 pl.; 1 yr.; Mult.), Mr. Selwood (1 pl.; 2 yrs.; Mult.), Mr. Stephenson (1 pl.; 1 yr.; Mult.). 'She's just that,' exclaims Mr. Selwood, and all agree Mrs. Marshall, proclaiming: 'Pull out all the stops on this one.' For Mr. Bryans it is tall growing, a trifle thin; however, for him the blooms are the very quintessence of delicacy. For Mrs. Marshall a rather tall growing floribunda with small flowers of deep pink and yellow. Excellent first year growth with good foliage. This rose stirs the emotions of Mr. Selwood. His last exclamation is: 'The gals love it.' The writer concurs with the sentiments of the other contributors (2 pls.; 1 yr.; Mult., 33 in.), excellent growth and no disease.

LINDA PORTER, H.T. (Dot. Int. B. and A. '57). Mr. Clark (1 pl.; 2 yrs.; 30 in.) reports this has been a slow starter. Colour is a clear light pink with blooms having good form; however, fourteen blooms aren't enough to satisfy. Plant free of disease.

LIVING, H.T. (Lammerts '57). Mr. Bryans (3 pls.; 1 and 2 yrs.; Mult., 45 in.) is delighted with this variety. He calls it the most outstanding red blend in the garden. A tall strong plant with good foliage. Mrs. Gallagher (1 pl.; 3 yrs.; Mult., med.) briefly

states: 'An accent in the garden by its odd colouring, short lived.' Mr. Lawton (1 pl.; 2 yrs.) is disappointed with the open flower rather thin looking, too few petals, nice in bud and is a good healthy plant. 'Glorious colour on a tall growing plant with good foliage,' is the comment of Mrs. Marshall (1 pl.; 1 yr.; Mult.); she admits it is not heavily petalled. Prof. MacAndrews (3 pls.; 2 yrs.; Mult., 40 in.) agrees with Mr. Lawton and adds it cannot take the heat. Mr. Parker (2 pls.; 3 yrs.; Mult., 36 in.) also dislikes the blooms as being too thin and lacking lasting quality. The colour for him is a vivid orange flame. Mr. Rhodes (2 pls.; 2 and 3 yrs.; Mult.), while admitting its fault, states it is well worth growing for its colour alone. A tall upright grower.

LOVE SONG, H.T. (G. Fisher '55). Not impressed, is the analysis of Mr. Clark (1 pl.; 3 yrs.; 16 in.). 'I am very fond of this rose,' comments Mr. Dufton (2 pls.; 3 yrs.; Mult.); has vigorous healthy growth, a beautiful bi-colour that has been consistently in his garden. Mr. Lawton (1 pl.; 4 yrs.; Mult.) has mixed feelings on this one. Growth slow but healthy bloom nice shape and colour, but 'Oh', so few. On its way out for Prof. MacAndrews (2 pls.; 3 yrs.; Mult., 36 in.) as each year it gets worse and weaker. Mrs. Morrison (1 pl.; 4 yrs.; Mult., 36 in.) admires the blooms of this plant, salmon pink with pale yellow reverse. A sturdy plant that bloomed well. Mr. Parker (2 pls.; 1 yr.; Mult., 30 in.) is not impressed. Blooms floppy. Mr. Selwood (1 pl.; 3 yrs.; Mult., 30 in.) tersely states: 'We could do without it.' Mrs. Wilson (1 pl.; 3 yrs.; Mult., 30 in.) reports the plant not too vigorous; however, produces very large double blooms that last well. Fades badly in hot weather.

MAGENTA, Fl. (Kordes '54). Mr. Buchanan (4 pls.; 2-4 yrs.; Can.) reports—a free-flowering variety of deep mauve. Very floriferous. The colour holds till the petals fall, which they do cleanly.

MAGIC WAND, Cl. Min. (R. S. Moore '54). Mr. Clark (1 pl.; 1 yr.; 9 in.) comments: 'Very few flowers and nothing outstanding—maybe next year.'

MAHAGONA, H.T. (Kordes '56). For Mrs. Gallagher (2 pls.; 2 yrs.; Can., med.) it is a slow bloomer; however, its bronzy tints are charming. Mr. Westbrook's (1 pl.; 2 yrs.; Can.) comment is short—'Gone and forgotten'.

MANITOU, H.T. (Swim. Int. Kordes '57). Mr. Mitchell (1 pl.; 2 yrs.; Can., 30 in.) advises this variety has bushy growth with extra large foliage, large urn-shaped bud opening to loose bloom of red-flushed copper.

MARCIA GANDY, H.T. (Verschuren '57). Mr. Dufton (2 pls.; 1 yr.; Can.) believes this rose has a great future. It is a newcomer to the reds and apparently a good one. First year's performance was excellent.

MARGARET, H.T. (Dickson '54). 'A favourite of mine,' is the comment of Mr. Blakeney (2 pls.; 2 yrs.; Can., 36 in.): gives excellent pink blooms on a strong healthy plant. In Mr. Bryans' (3 pls.; 1 and 2 yrs.; Can. and Mult., 36 in.) opinion the best medium pink rose produced in the last five years, very floriferous considering the size and quality of the blooms. Mr. Cadsby (1 pl.; 1 yr.; Can.) will reserve judgment until next year. Mr. Dufton (3 pls.; 3 yrs.; Mult.) reports vigorous growth, a little prone to Black Spot. Mrs. Callagher (2 pls.; 2 yrs.; Can., med.) describes it as having lovely silvery-pink blooms on a good plant. Mr. Jubien (2 pls.; 2 yrs.; Can., 36 in.) would never do without this rose for the garden and cutting. 'A grand rose in every way,' is the comment of Mr. Lawton (4 pls.; 3 yrs.; Can.), 'just about the best rose in the garden for bloom, it is healthy too.' 'Out on the coast, "Margaret", like "Anne Letts", is about the most exciting pink we have had in years,' exclaims Mrs. Murdoch (3 pls.; 3 yrs.; Mult., 5 ft.); and it has good foliage. Mr. Norton (5 pls.; 2 and 3 yrs.; Can.) encountered some Black Spot this year; however, he still considers this our best pink rose. For Mr. Parker (3 pls.; 1 and 2 yrs.; Mult. and Can., 30 in.) it was a good bush with many blooms of excellent shape. There is only one fault Mr. Selwood (2 pls.; 4 yrs.; Mult.) can find; that is, should Black Spot be around it will gravitate towards her. 'It's O.K. by me,' comments Mr. Stollery; perhaps the open flowers do not quite live up to the promise of the buds is the worst he could say. No trouble with Black Spot. Mr. Westbrook (4 pls.; 1-2 yrs.; Can.) still rates 'Margaret' as the best of the light pinks. Early and profuse producer of blooms of classic form. For the writer (3 pls.; 2-4-5 yrs.; 36 in.) this is a top rose with strong growth, has healthy foliage. No Black Spot or Mildew. Recommends this variety to the average grower.

MARIGOLD, H.T. (Lcns '55). This is a very good rose, reports Mr. Buchanan (5 pls.; 2-3 yrs.; Can.); colour is apricot salmon. The blooms being of good size about 5 in.

MARY HAYWOOD, Min. (R. S. Moore '57). Mr. Clark (1 pl.; 1 yr.; 5 in.) would like to reserve judgment until next year. Variety appears to have possibilities.

MEG, Cl. (Gossett '54). This is an outstanding climber for Mr. Parker (1 pl.; 2 yrs.; Mult.), a beautiful bloom of lovely pink and apricot shadings. Prolific in the early season, a few blooms all year. Many canes reach up as far as 9 ft. Needs shade. Mr. Rhodes (1 pl.; 2 yrs.; Mult.) also advises it needs shade as blooms fade in full sun. Makes a good pillar rose.

MERRY WIDOW, Gr. (Lammerts '58). Mr. Clark (1 pl.; 1 yr.; 57 in.) reports a tall vigorous plant. Buds are a beautiful red opening to semi-double flowers, long-lasting with some fading.

MESSAGE, *see* WHITE KNIGHT

MIDNIGHT, H.T. (Swim '56). The deep velvety-red buds cause much comment from garden visitors, is the report of Mr. Clark (1 pl.; 3 yrs.; 42 in.). Blooms open up too rapidly; has fragrance. Foliage glossy green; however, susceptible to both Black Spot and Mildew. 'I always fall for a red rose,' states Prof. MacAndrews (3 pls.; 3 yrs.; Mult., 36 in.); 'however, I could do without this one. Flowers small, scant and growth too limber.' Mr. Selwood (1 pl.; 1 yr.; Mult.) had a good bush with fine healthy foliage. Flowers are a good colour but not enough. Buds open too quickly.

MISS FRANCE, Fl. (Gaujard '56). Mr. Mitchell (1 pl.; 1 yr.; Mult., 30 in.) is pleased with first year results. Plant a vigorous grower with bronze foliage. Hybrid tea form in bud and bloom long lasting. Colour coppery cinnabar.

MME RENE COTY, H.T. (Meilland '55). Mr. Billington (1 pl.; 2 yrs.; Mult., 36 in.) is very disappointed with this variety. Weak growth and Black Spots badly.

MOJAVE, H.T. (Swim '54). Mrs. Antoft (4 pls.; 1 yr.; Mult.), Mr. Bryans (3 pls.; 1 and 2 yrs.; Mult., 48 in.) and Mr. Lawton (1 pl.; 2 yrs.; Mult.) are agreed that the blooms are inclined to be thin. Mrs. Antoft advises plants had tall erect habit with bloom production colourful but sparse; with this Mr. Lawton is in agreement. Mr. Bryans states that it is an excellent autumn blooming rose and is delighted with the colour. It can be exhibited successfully, is the report of Mr. Clark (1 pl.; 4 yrs.; 52 in.). The flowers are always borne singly on long stems on a tall upright disease-free plant. The colour being unusual. The writer concurs with all the sentiments expressed. To me the colour is an apricot orange tinted with red (2 pls.; 4 yrs.; Huey, 39 in.).

MONTEZUMA, Gr. (Swim '55). This rose was the star performer in the garden of Mrs. Antoft (23 pls.; 1 yr.; Mult.). Bushes were well branched and had an unbelievable wealth of long-stemmed beautiful hybrid tea-like blooms of a pleasing dull rose red colour. One of the best in the grandiflora class for Mr. Billington (5 pls.; 1 and 2 yrs.; Mult., 42 in.), the bloom being profuse and large. Mr. Blakeney (1 pl.; 2 yrs.; Mult., 36 in.) comments: 'When she is good she is very very good but when it rains a lot she is horrid.' Plant vigorous. Mr. Bryans (2 pls.; 1 and 2 yrs.; Mult., 54 in.) believes this to be the best rose Herb Swim has produced to date. Is floriferous. Mr. Buchanan (4 pls.; 1 yr.; Can.) is afraid this rose is not for his part of the country—seems to need heat. While the blooms are large they will not open. Mr. Cadsby (3 pls.; 1 and 2 yrs.; Mult.) believes this is nothing more than a hybrid tea. Colour variable. 'The colour and form of "Montezuma"s blooms are lovely, is the enthusiastic comments of Mr. Clark (1 pl.; 4 yrs.; 31 in.); the bushy plant is healthy and there is some fragrance. A very strong grower for Mr. Jubien (2 pls.; 3 yrs.; Mult., 40 in.). This is also the comment of Mr. Lawton (1 pl.; 3 yrs.; Mult.) bloomed well in his garden. Has been a good performer for Prof. MacAndrews (3 pls.; 3 yrs.; Mult., 36 in.). Colour light red on the orange cast attracts attention in the garden. Looks more like a hybrid tea than a grandiflora. Montezuma is tops with Mrs. Morrison (1 pl.; 3 yrs.; 36 in.); healthy, plenty of bloom—the quality of a hybrid tea. 'Of exhibition quality,' states Mr. Norton (4 pls.; 2 yrs.; Can.), 'is disease free and winters well.' Mr. Parker (4 pls.; 1-3 yrs.; Mult., 42 in.) describes this as a hybrid tea tall bush. He now grows it as a hybrid tea and disbuds blooms—will not tolerate rain. To Mr. Selwood (1 pl.; 4 yrs.; Mult., 57 in.) it is second to 'Queen Elizabeth' in the grandifloras. Exhibition type is

disbudded. Mr. Schram (1 pl.; 1 yr.; Mult.) likes it better than 'Queen Elizabeth', calls it the best rose in his garden. For him it is medium height with excellent foliage. The large high-centred blooms of a deep rich salmon shade were mostly on single stems. Mr. Stollery regards it as a true hybrid tea and it is irritating to have it called a *grandiflora*. 'Am not impressed,' comments Mr. Westbrook (1 pl.; 2 yrs.; Mult.), 'I suppose it has its place but -' Mrs. Wilson (5 pls.; 1 yr.; Mult., 60 in.) nominates it as her favourite *grandiflora*, has large clusters of bloom produced on extremely long stems with beautiful foliage, and is always in bloom. Established plants winter-killed during last winter.

MONTROUGE, Fl. (Gaujard '56). Mr. Buchanan (3 pls.; 1 yr.; Can.) reports a good-sized bush with disease-resisting foliage, flowers are a bright salmon red, blooming in fairly large clusters. Looks promising.

MOONSPRITE, Fl. (Swim '56). This variety has done well for Mr. Clark (1 pl.; 3 yrs.; 24 in.) in shows. Bushy plant is disease-resistant and has nice foliage. The clusters of bloom are sometimes too heavy for the stems. Mrs. Steinbergs (1 pl.; 1 yr.; Mult.) has the same nice things to say about this rose. The blooms being creamy white with yellowish centre. Mildly fragrant.

MORNING DAWN, L.C. (Boerner '55). For Mr. Clark (1 pl.; 3 yrs.; 31 in.) 'Morning Dawn', like many climbers, was severely frozen back last winter. Made little growth this year; however, had twenty-two blooms huge hybrid tea type. Colour pink suffused with yellow.

MOULIN ROUGE, Fl. (Meilland '53). Mr. Bryans (2 pls.; 2 yrs.; Mult., 36 in.) likes the deep scarlet colour with its velvety texture of this rose. Plants have bushy growth. He considers it definitely a rose to grow even if not as floriferous or as consistently good as other reds. 'Still the best in that style and colour range,' declares Mr. Butwick (1 pl.; 3 yrs.; Mult., 24 in.); he was unfortunate that in the severe winter one bush was killed outright and the other back to the bud union. Mr. Parker (3 pls.; 3 and 4 yrs.; Mult., 30 in.) reports, well-shaped dark red blooms, free flowering, a very good variety. It took three seasons for this variety to become established for the writer (2 pls.; 3 yrs.; Can., 27 in.). This year growth was vigorous, bloom profuse with foliage being disease free. Colour did not fade. Consider this a first-class brilliant red floribunda. (*Last year for reporting this rose.*)

OBERON, Fl. (Dickson '54). Mr. Norton (2 pls.; 3 yrs.; Can.) reports good growth and bloom production. Some evidence of Black Spot in a bad year for same. Mr. Stollery had a nice-shaped bush, very colourful and a good bloomer. Warns, however, it is pretty messy if you do not get after the faded blooms.

OLALA, Fl. (Tantau '56). Mr. Buchanan (3 pls.; 1 yr.; Can.) regards this as one of the most outstanding red floribundas he has planted this year. Clusters large and long lasting with blooms coming out all over the bush. Sun or rain does not effect the bloom. Has ordered more stock. Mr. Mitchell (2 pls.; 1 yr.; Can., 32 in.) reports bushy growth, green leathery foliage. The blooms are semi-double, being blood-red with lighter centre.

PAPILLON ROSE, Fl. (Lens '56). It is a 'gem', is the enthusiastic report of Mrs. Gallagher (2 pls.; 1 yr.; Mult., med.), lovely pink buds of hybrid tea form on a spreading bush. Mr. Buchan (3 pls.; 1 yr.; Can.) likes it very much, therefore, has ordered more stock. Has a flower, that for Mr. Buchanan is almost the duplicate of 'Picture'. A refreshing new floribunda, is the way Mr. Butwick (1 pl.; 1 yr.; Can. 18 in.) describes this rose. Average size bush. Resembles the rose 'Frolic'. Makes a good show for Mr. Mitchell (3 pls.; 1 and 2 yrs.; Can., 30 in.), upright bushy growth with stiff canes, foliage heavy. Colour is bright shrimp-pink.

PAPRIKA, Fl. (Tantau '57). 'The name describes the colour of the flower,' comments Mr. Buchanan (3 pls.; 1 yr.; Can.); the colour holds till the petals fall. Strong growing bush, very floriferous. The blooms being long-lasting. Mr. Mitchell (1 pl.; 1 yr.; Can., 24 in.) reports plant upright, bushy, with heavy dark foliage-semi-double opening to 3 in. flat bloom in clusters. The colour being bright turkey red.

PARIS-MATCH, H.T. (Meilland '57). Mr. Dufton (1 pl.; 1 yr.; Can.) reports a vigorous grower, blooms crimson carmine. Looking forward in anticipation to next year's performance.

PASSION, Fl. (Gaujard '55). Mr. Buchanan (6 pls.; 1 yr.; Can., 48 in.) advises this would make a good hedge plant, being constantly in bloom. Foliage dark bronze green, disease-resistant. The colour is a fiery red and blooms both in clusters and singly. Fragrant.

PEACEFUL, H. T. (Boerner '56). For Mr. Clark (1 pl.; 3 yrs.; 27 in.) it is a deep pink fully double rose too heavy for the weak stems, plant is low-growing and slightly sprawling. 'Disappointing,' is the comment of Prof. MacAndrews (2 pls.; 2 yrs.; Mult., 24 in.), 'another big flower on a small bush.'

PECHTOLD FLAME, H. T. (Verschuren-Pechtold, Gandy '53). Mrs. Antoft (7 pls.; 1 yr.; Mult.) is fond of this rose. Plant is of vigorous growth, the large blooms being a vivid glowing orange scarlet. Excellent in the fall. Believes more should be growing it. One of the best in the garden, is the report of Mr. Westbrook (1 pl.; 3 yrs.; Can., 42 in.); he recommends same without reservation to anyone who wants an orange-scarlet bloom of classical form. Plant is sturdy and compact. (*Last year for reporting this rose.*)

PERFECTA, *see* KORDES PERFECTA

PHOENIX SUNGLOW, Fl. (Marsh '58). Mr. Butwich (1 pl.; 1 yr.; Mult., 12 in.) is disappointed with this one. Giving it one more year's grace and if no improvement—OUT.

PICCOLO, Fl. (Tantau '57). Mr. Buchanan (3 pls.; 1 yr.; Can.) is charmed with this variety and would recommend it to anyone liking floribundas. The blooms are a very dark crimson and last up to three weeks. The plant being constantly in bloom—a lovely sight.

PINK CAMEO, Cl. Min. (Moore '54). Mr. Clark (1 pl.; 1 yr.; 9 in.) advises blooms are a clear pink and have good form. Looking forward to next year. Mr. Wilson (1 pl.; 2 yrs.; own root) declares this variety to be exquisite on a trellis 3 ft. high. Petite foliage. Blooms a soft pink are somewhat camellia formed and are borne in clusters of three to five.

PINK CHARMING, H. T. (Leenders '53). Plant 'Picture', is the terse comment of Mr. Cadsby (1 pl.; 2 yrs.; Can.). Has everything to recommend it, states Mr. Dufton (2 pls.; 2 yrs.; Can.). An excellent garden and cutting pink, is the report of Mr. Jubien (3 pls.; 2 yrs.; Can., 36 in.), wouldn't be without it. It has a bloom that is charming for Mr. Parker (2 pls.; 1 and 2 yrs.; Mult. and Can., 30 in.), a good pink, fragrant with good foliage. It does not raise the blood-pressure of Mr. Westbrook (2 pls.; 1 yr.; Can.); seemed to be a good pink bedding rose. (*Last year for reporting this rose.*)

PINK CHIFFON, Fl. (Boerner '56). This is a woman's rose and colour—they love it, is the opinion of Prof. MacAndrews (1 pl.; 2 yrs.; Mult., 30 in.); it is a very nice clear pink. Mr. Clark (1 pl.; 1 yr.; 26 in.) reports a strong bushy and disease-resistant plant. The delicate light pink buds have good form. It really caught his wife's fancy. Good for small arrangements. To this Mr. Stephenson (1 pl.; 1 yr.; Mult.) agrees, also very floriferous.

PINK FAVOURITE, H. T. (Von Abrams '56). Mr. Bryans (1 pl.; 1 yr.; Mult., 36 in.) reports the plant habit and foliage are excellent; while it blooms well and the blooms are good it lacks a certain refinement. 'A good exhibition variety for me,' comments Mr. Clark (1 pl.; 2 yrs.; 32 in.); has beautiful foliage of glossy deep green. Colour is a deep pink with veining on outer petals. For Mr. Dufton (3 pls.; 3 yrs.; Mult.) an outstanding variety. The finest bloom in his garden last year was cut from this variety. Fine foliage, sturdy plant, very nice blooms, states Prof. MacAndrews (2 pls.; 3 yrs.; Mult., 36 in.); admits, however, it will not stand rain. Very pleased with first year's result is Mr. Parker (3 pls.; 1 yr.; Mult., 30 in.). Foliage outstanding and bloom form good. For Mr. Rhodes (1 pl.; 1 yr.; Mult.) this rose was a very free bloomer of exhibition bloom. In the opinion of Mr. Selwood (2 pls.; 3 and 4 yrs.; Mult.) this is 'Almost a great rose'. It has excellent plant habit and very floriferous but flowers do not stand up on show bench. Mr. Westbrook (1 pl.; 1 yr.; Mult.) reserves judgment until next year.

PINK FROST, H. T. (Swim '54). Mr. Clark (1 pl.; 4 yrs.; 27 in.) is not entirely satisfied with this one even though it has improved each year in form. An open sprawling plant.

PINK LUSTRE, H. T. (Verschuren, J. & P. '57). Mr. Cadsby's (1 pl.; 2 yrs.; Mult.) plant suffered serious winter injury. Vitality almost completely destroyed. Mr. Clark (1 pl.; 3 yrs.; 48 in.) is in love with this rose. It brought him his first Queen of the Show Trophy

this year. An open upright plant, foliage quite disease-resistant. Bloom production only average; however, the beauty of the bloom compensates for this. Colour lustrous pink. 'Lots of life to this one', is the comment of Prof. MacAndrews (3 pls.; 3 yrs.; Mult., 48 in.), 'large full blooms on a big plant.' Mrs. Naismith (2 pl.; 1 yr.; Mult., 48 in.) reports a very vigorous plant but foliage sparse. Inclined to Black Spot. A disappointment for Mr. Palmer, his plant being rather straggly and the colour not exciting.

PINK PEACE, H. T. (Meilland, C.-P. '59). This rose did not come up to expectations in any department for Mr. Butwick (1 pl.; 1 yr.; Huey, 19 in.), few blooms and general lack of vigour. Mr. Clark's (1 pl.; 1 yr.; 48 in.) only recommendation is the growth, tall and vigorous; has slight fragrance. Looks promising, states Mr. Jubien (1 pl.; 1 yr.; Mult., 30 in.) bush being strong and foliage good with poor bloom production. 'Just another rose,' comments Prof. MacAndrews (1 pl.; 1 yr.; Mult., 30 in.), 'this variety is trading on the reputation of its parent "Peace".' Mrs. Naismith (2 pls.; 1 yr.; Mult., 48 in.) is a little disappointed in the colour, not a good pink. Also not in love with the colour 'rather odd—hardly a pink' advises Mrs. MacDonald (1 pl.; 1 yr.; Mult., 24 in.); had excellent growth but only five blooms. Mr. Selwood (1 pl.; 1 yr.; Mult.) also draws attention to it being a shy bloomer. Colour good, form only fair. Mr. Stephenson (1 pl.; 1 yr.; Mult.) dislikes the harsh colour and is discarding. For Mr. Westbrook (1 pl.; 1 yr.; Mult.) the blooms are huge deep pink with a silvery reverse, form is good with some fragrance. Foliage seems disease-resistant.

PINK SPIRAL, H. T. (McGredy '53). 'A tall grower that needs lots of room,' comments Mr. Westbrook (3 pls.; 2-3 yrs.; Can.). Blooms are a beautiful deep pink well formed, continuous bloom excellent for garden display or cutting. Mr. Bryans (2 pls.; 2-3 yrs.; Mult., 24 in.) agrees as to the steady production of bloom and states the blooms are a sheer delight. Only moderately vigorous with sparse foliage. 'Improved over last year', advises Mrs. Gallagher (3 pls.; 3 yrs.; Can. Med.), 'more bloom in first part of summer.' Mr. Parker's (3 pls.; 4 yrs.; Mult., 30 in.) plants are not doing well, few blooms and poor growth. (*Last year for reporting this rose.*)

POLKA DOT, Min. (Moore '56). Mr. Wilson (1 pl.; 1 yr.; own root) reports very double blooms of exhibition hybrid tea form. Blooms are individual on fairly long stems. Colour is white or light cream.

POLY PRIM, Fl. (Eddie '53). Mr. Blakeney (1 pl.; 2 yrs.; Mult., 24 in.) reports a good branching plant with excellent double yellow blooms which he considers superior to 'Goldilocks'. This variety has done well for Mr. Jubien (1 pl.; 5 yrs.; Mult., 30 in.) over the years. Unfortunately it does not have too long a period of bloom. Mr. Parker (1 pl.; 3 yrs.; Mult., 24 in.) also advises it is better than 'Goldilocks'. Plants low and bushy. Not free blooming. For Mr. Selwood there is not enough blooms in clusters. The writer agrees with Mr. Selwood; however, it winters well and growth is strong, a good yellow (2 pls.; 1 and 4 yrs.; Mult., 30 in.). (*Last year for reporting this rose.*)

PRELUDE, H. T. (Meilland '54). 'Not so good in dry heat of '59', comments Mrs. Gallagher (1 pl.; 4 yrs.; Mult., med.), 'maybe it is a wet weather rose.' Mr. Bryans (1 pl.; 1 yr.; Mult., 24 in.) reports growth of medium height and spreading, blooms are fairly large of a lovely lavender mauve. Still does not compare with 'Lilac Time'. Mr. Parker (3 pls.; 1-4 yrs.; Mult., 36 in.) is pleased with this variety, thinks it is the best colour in its class—very free blooming. The blooms being small and well shaped. Fragrant—a little Mildew.

PREMIER BAL, H. T. (Meilland '55). Mr. Billington (1 pl.; 2 yrs.; Mult., 30 in.) is disappointed with this variety's performance. Did pick up a little in the fall—has hopes for next year. Mrs. Morrison (1 pl.; 3 yrs.; Mult.) is pleased with the blooms, golden ivory to crimson—is much admired in her garden.

PRESTIGE, S. (Kordes '57). A variety that has done well for Mr. Anderson (1 pl.; 2 yrs.; Mult.), it blooms fairly constantly. The colour a fine red. Has ordered four more. This rose is well named, reports Mr. Buchanan (7 pls.; 1 yr.; Can., 5 ft.), the tall-growing plant was covered with blooms of a bright scarlet—all through the season. Has lots of good foliage. Would like to have room for more.

QUEEN ELIZABETH, Gr. (Lammerts '54). Mrs. Antoft (9 pls.; 1 and 2 yrs.; Mult.) reports—tall erect habit, lovely bright pink blooms are best in bud form. Continuous bloom intensifying in fall. Mr. Billington's (3 pls.; 1-3 yrs.; Mult., 42 in.) older plants suffered badly in last year's severe winter. This rose did not like dry summer; however, he still thinks this is an excellent one. An outstanding performer in every way for Mr. Bryans (3 pls.; 2 yrs.; Mult., 5 ft.). Mr. Buchanan (7 pls.; 1-2 yrs.; Can.) had similar results as Mr. Billington and is deferring judgment for another year. Mr. Cadsby (1 pl.; 1 yr.; Can.) nominates it as a fine rose but unfortunately quite tender. Not enough flowers, states Mr. Clark (1 pl.; 5 yrs.; 48 in.). Vigorous growth with disease-free foliage. It is top rose with Mr. Dufton (4 pls.; 3 yrs.; Mult.). 'A lovely pink shade', exclaims Mrs. Gallagher (2 pls.; 4 yrs.; very tall), 'but slow in showing it.' For Mr. Jubien (7 pls.; 1-4 yrs.; Mult., 40 in.) she is the 'Queen of the Pinks'. After a severe winter the 'Queen' did fairly well for Mr. Lawton (2 pls.; 3 yrs.). It made good growth on the 'Prairie' for Mrs. MacDonald (2 pls.; Can., 33 in.), who is fond of the clear pink blooms—fragrant too. Mr. Norton (3 pls.; 2 yrs.; Can.) still cannot become excited about this rose. Thinks 'Queen Elizabeth' would be better on multiflora. 'A magnificent rose,' is the eulogy of Mr. Selwood (2 pls.; 6 yrs.; Mult.); grows 7 ft. high in Vancouver, and is bushy, healthy and very floriferous. Mr. Schram (1 pl.; 2 yrs.; Mult., 5 ft.) is excited about this rose. He advises that for him it is a grand upright grower with a regal appearance—true to its name. For Mr. Stollery it is the most ungainly rose he ever grew, thin, tall, with all the blooms on top. Had three, discarded two with no regrets. Admits it would be a good specimen bush in front of a high verandah. Mrs. Wilson (1 pl.; 1 yr.; Mult.) advises her established plant winter-killed, last year. However, she regards it as an excellent grandiflora.

RED CAP, Fl. (Swim '54). Mr. Stephenson (1 pl.; 1 yr.; Mult.) reports a large healthy plant with hybrid tea blooms, borne singly and in clusters, stinging bloomer.

RED EMPRESS, Cl. (Mallerin '56). Mr. Clark (1 pl.; 3 yrs.; 72 in.) reports beautifully formed, carmine long-lasting buds. Due to last year's tough winter the 'Empress' was late in bringing forth new growth. Looking forward to next year. Mr. Mitchell (1 pl.; 1 yr.; Mult., 60 in.) advised this variety bloomed three times in first year—unusual for a climber. Heavy dark green foliage with rigid canes, 3½ in. double bloom of cardinal red.

RED FAVOURITE, Fl. (Tantau, Wheatcroft '51, C.-P. '54). Mrs. MacDonald (2 pls.; Mult., 24 in.) advises this floribunda has healthy foliage and produces clusters of clear red blooms that are long lasting. Its performance in the fall was disappointing; however, she still likes it. 'One of my favourites', comments Mr. Parker (2 pls.; 4 yrs.; Mult., 24 in.), 'a delightful bloom on a poor growing bush.' Intermittent but not stinging bloomer is the finding of Mr. Selwood (1 pl.; 2 yrs.; Mult.). A good rose.

RED WINGS, Fl. (Boerner '58). 'I like it,' is the comment of Mr. Clark (1 pl.; 1 yr.; 31 in.). Free blooming with dark red blooms that fade only slightly in hot weather. In colour most of the season.

RED WONDER, Fl. (de Ruiter, C.-P. '54). Mr. Parker (2 pls.; 4 yrs.; Mult., 42 in.) reports a spreading bush that blooms well, colour being dark red.

RENDEZVOUS, H.T. (Meilland '55). Developed very well in its first year for Mr. Billington (1 pl.; 1 yr.; Mult., 36 in.). Tall upright growth—foliage was not heavy. Bloom excellent but sparse.

ROBIN, Min. (P. Dot '56). Mr. Clark (2 pls.; 3 yrs.; 6 in.) reports little bloom compared to other miniatures. Colour is an unusual shade of red. Mr. Wilson (2 pls.; 2 yrs.; own root, 8 in.) is fond of this variety. Has upright growth with high petite foliage. Blooms are long lasting, usually in clusters of three. Splendid miniature characteristics.

RONDO, H.T. (Tantau '55). 'Very striking blooms,' states Mr. Parker (2 pls.; 3 yrs.; Mult., 42 in.). Blooms well especially early in the season. Colour scarlet red.

ROSE GAUJARD, H.T. (Gaujard '58). Mr. Buchanan (1 pl.; 1 yr.; Can.) advises, as it was planted late there was not too much growth; however, the few flowers were very attractive. Colour being deep vermillion with a white reverse. Very good blooms. 'We shall wait and see,' is the comment of Mr. Mitchell (2 pls.; 1 yr.; Can., 36 in.). Has not lived up to its great reputation in Europe. Had many malformed blooms.

ROSEMARY ROSE, Fl. (de Ruiter '54). Mr. Buchanan (1 pl.; 2 yrs.; Can.) reports the one plant that survived the winter made good growth. Is a tall grower always in bloom in clusters. Colour a deep cherry rose. Flowers are of zinnia-like form. Good fragrance for a floribunda.

ROUNDELAY, Gr. (Swim '54). This rose was the first blue ribbon winner for Mr. Clark (2 pls.; 3-5 yrs.; 39 in.), has therefore won a permanent spot in his heart. A vigorous disease-free plant with smooth glossy foliage. Would like more bloom. Mr. Selwood (1 pl.; 2 yrs.; Mult.) agrees as to the vigour and disease-resistant qualities of this variety. For him it is a good bloomer and the blooms hang on. A good velvety red and fragrant.

ROYALIST, H.T. (McGredy '54). It showed great improvement for Mr. Bryans (1 pl.; 2 yrs.; Mult., 36 in.). Plant habit and foliage satisfactory. The flowers having a definite fragrance. Mr. Parker (4 pls.; 5 yrs.; Mult., 48 in.) reports a spreading large bush, very free bloomer and very fragrant. Another good garden variety in the deep pink class, advises Mr. Westbrook (3 pls.; 2-4 yrs.; Can.). Particularly good in autumn.

ROYAL TAN, H.T. (McGredy '55). Mr. Jubien (1 pl.; Mult. 36 in.) reports it grew well but did not produce any bloom this year. Mr. Parker (1 pl.; 2 yrs.; Can.) tersely states; R.I.P. will not replace. It was executed—with no regrets—by Mr. Westbrook.

RUBY LIPS, Fl. (Swim '58). Mr. Clark (1 pl.; 1 yr.; 39 in.), Mrs. Naismith (2 pls.; 1 yr.; Mult., 30 in.) and Mr. Stephenson (1 pl.; 1 yr.; Mult.) are all in agreement as to this being an excellent floribunda. 'A riot of colour practically all season', comments Mr. Clark, 'plant being strong and bushy and resistant to disease.' Mrs. Naismith is fond of 'Ruby Lips' which she states is aptly named, a very brilliant red with the added attraction of being free flowering. Mr. Stephenson mentions the large clusters of blooms. The writer (1 pl.; 1 yr.; Mult., 33 in.) concurs that in its first year this appears to have a good future.

SALUTE, Fl. (McGredy '58). Mr. Butwick (1 pl.; 1 yr.; Can., 12 in.) reports semi-double bi-colour rose, flowers deep yellow in centre to medium red and deep red on outer fringe. Slow to establish, therefore too early for proper analysis.

SANDRINGHAM, Fl. (Kordes '55). This rose fails to excite Mrs. Gallagher (1 pl.; 2 yrs.; Can., very tall) who comments, 'nice yellow flower—uninteresting plant'.

SARABANDE, Fl. (Meilland '57). This rose is a favourite with Mr. Buchanan (6 pls.; 1 and 2 yrs.; Can.), a good dark scarlet with blooms in good-sized clusters and in bloom all season. Mr. Butwick (1 pl.; 1 yr.; Mult., 15 in.) reports that plant has a rather low-spreading habit. Blooms fade somewhat in full sun. Black Spots. For Mrs. Marshall (1 pl.; 1 yr.; Mult.) this bright red floribunda is a beauty. Mr. Rhodes (1 pl.; 2 yrs.; Mult.) considers this the best of its colour (Geranium Red). Medium growth and shows promise of a great future. Mr. Stephenson (1 pl.; 1 yr.; Mult.) is pleased with this rose. States. 'You can see it a block away.' Mrs. Steinbergs (1 pl.; 1 yr.; Mult.) is delighted with this variety. Had strong growth with disease-free foliage. She especially likes the trusses of single blooms that look like stars from afar.

SHEPHERD'S DELIGHT, Fl. (A. Dickson '57). Mr. Stollery (1 pl.; 1 yr.; Can.) considers this variety promising, states: 'Here is a rose that I hope will bloom well, for unlike so many others it actually has something to add to the garden.' Not much bloom. Mr. Buchanan (3 pls.; 1 yr.; Can.) reports a very tall grower with plant never out of bloom all season; a beautiful sight, colours of bloom being a combination of yellow orange and red. Mr. Norton (2 pls.; 1 yr.; Can.) proclaims this to be the outstanding bi-colour floribunda. Mr. Westbrook's (1 pl.; 1 yr.; Can.) plant became well established about mid-August. Will withhold judgment until next year.

SIR WINSTON CHURCHILL, H.T. (A. Dickson '55). 'This rose has done very well in my garden,' states Mr. Bryans (3 pls.; 1 and 2 yrs.; Can. and Mult., 36 in.). Steady bloomer with large blooms of salmon-pink shaded orange. Strong sturdy plant. Mr. Cadsby (1 pl.; 1 yr.; Can.) would like to reserve judgment. Growth slow. A great disappointment for Mr. Dufton (5 pls.; 2 yrs., Can.), sorry has nothing good to say for it. For Mr. Jubien (2 pls.; 2 yrs.; Can., 30 in.) it was much better in second year—looks like a good garden rose. Mr. Norton's plants proved tender, during the past severe winter. Mr. Parker (2 pls.; 1 yr.; Mult., 36 in.) reports a good strong bush, not many blooms first

year with fragrance, 'uninteresting variety'. While a better colour this year it does nothing for Mr. Selwood (1 pl.; 2 yrs.; Mult.): a rather stingy bloomer. Mr. Westbrook (2 pls.; 2-3 yrs.; Can.) is still satisfied, plants had excellent growth covered with disease-resistant foliage. One of the better pink blends.

SORAYA, H. T. (Meiland '55). Mr. Bryans (2 pls.; 2 yrs.; Mult., 36 in.) is enchanted with the buds and half-open flowers; however, the form of the open flowers leaves something to be desired. Calls the rose an eye-catcher and rates same as a splendid garden decorative. Mr. Dufton (1 pl.; 1 yr.; Can.) comments that if this one did not fade so badly he would have to rate it higher. Mr. Parker (2 pls.; 3 yrs.; Mult., 48 in.) had strong growth with very striking foliage. Colour striking early in season, dull later. Free flowering. Mrs. Steinbergs (1 pl.; 1 yr.; Mult., 42 in.) had wonderful results, to start with, strong growth, beautiful disease-free foliage; the first crop of blooms a vivid brilliant red, had very good form. Alas, the second crop was terrible, the poor sun princess could not stand the wet, cool fall weather.

SPARRIESHOOP, S. (Kordes '53). Mr. Cadsby (1 pl.; 1 yr.) comments very briefly: 'Undistinguished single bloom. I found the colour very dull.' Mrs. Gallagher (1 pl.; 1 yr.; Mult.) believes it will be very good as it develops. Grew to 5 ft. in first year with single pink flowers like 'Dainty Bess', but not so deep in colour. Had plenty of bloom. Mr. Westbrook (1 pl.; 1 yr.; Mult.) is not impressed in spite of the tall growth. The colour for him being a dull pink. Is not fond of singles. (*Last year for reporting this rose.*)

SPARTAN, Fl. (Boerner '55). 'First year impressions are definitely favourable,' says Mr. Bryans (1 pl.; 1 yr.; Mult., 36 in.). Strong bush with good production of salmon-orange blooms in the summer; however, little autumn bloom. Mr. Cadsby (2 pls.; 2 yrs.; Mult.) is sold on this floribunda, calls it one of the greatest. It never quite lived up to the expectations of Mr. Clark (1 pl.; 4 yrs.; 28 in.); while the colour is attractive at times, form is usually poor. 'A front rank floribunda,' states Mr. Dufton (2 pls.; 2 yrs.; Can.). Prof. MacAndrews (2 pls.; 3 yrs.; Mult., 36 in.) regards this as a fine bedder, floriferous and never looks messy. Mrs. Naismith (4 pls.; Mult., 24 in.) designates it as her best floribunda with no perceptible faults. Mr. Parker (3 pls.; 2 yrs.; Mult., 36 in.) reports bushy plants with large fragrant blooms which do not stand either sun or rain. Mr. Rhodes (1 pl.; 2 yrs.; Mult.) comments: 'Has plenty of bright orange-red blooms.' 'One of the best, good anywhere,' advises Mr. Schram (3 pls.; 2 yrs.; Mult., 30 in.). Blooms long lasting and hold their colour well. One of the first to bloom in the spring and last in the fall. For Mr. Selwood (1 pl.; 2 yrs.; Mult.) it is a symmetrical bush and the blooms have good form for a floribunda. Some fragrance.

SPECTACULAR, *see* DANSE DU FEU

STARFIRE, Gr. (Lammerts '58). Mr. Butwick (1 pl.; 1 yr.; Huey, 18 in.) advises the brilliant current red blooms make a grand sight when the plant is in full bloom. Foliage bronze green and holly-like in shape. Only criticism is poor bloom recurrence. Mr. Clark (1 pl.; 1 yr.; 41 in.) reports a vigorous, tall, bushy plant. Blooms of cherry red are very interesting; however, production only equals average hybrid teas—should be better. Did well for Mr. Jubien (1 pl.; 1 yr.; Mult., 30 in.) in its first year—looking forward with interest to next year. Mr. Selwood (1 pl.; 1 yr.; Mult.) is very pleased with this variety. It is a strong grower and foliage disease-resistant. The distinctive colour making it a good addition to the grandifloras. Blooms are long lasting when cut. Mr. Stephenson (1 pl.; 1 yr.; Mult.) is in entire agreement with Mr. Selwood.

STARLET, Fl. (Swim '57). Mr. Butwick (1 pl.; 1 yr.; Can. 15 in.) likes this variety, considers it superior to 'Goldilocks'. Foliage quite clean, being a deep glossy green with one upright deep yellow bloom per stem. Mr. Clark (1 pl.; 2 yrs.; 15 in.) reports a low plant with little growth. The bright yellow blooms are nice but production is poor. Late touch of Mildew.

STERLING SILVER, H. T. (G. Fisher '57). Mr. Clark liked the colour but plant failed to make it through the winter. Mr. Jubien (1 pl.; 2 yrs.; Mult., 30 in.) thinks every grower should have one in his garden, even though his was not a strong grower and produced few blooms. Mr. Lawton (1 pl.; 1 yr.) received a poor specimen that did not grow and did not bloom, in fact it was afraid to live and afraid to die; discarded—but will replace from a different nursery. This is the only lavender that Prof. MacAndrews (2 pls.; 2 yrs.; Mult.,

24 in.) would give two cents for. Lovely shaped buds, colour clearer and more life than other lavenders. Mrs. Naismith (2 pls.; Mult., 24 in.) comments that the fragrance helps to make up for lack of vigour. Foliage thin and tends to Black Spot. Mr. Palmer also mentions that it Black Spots badly; states the bud is nice, the best in its colour, with perfume. 'Sometimes I fear I may get to like it,' says Mr. Selwood (1 pl.; 1 yr.; Mult.). If you must have a lavender, this is the best of the group—a garden variety.

ST. PAULI, Fl. (Kordes '58). This is Mr. Buchanan's (2 pls.; 1 yr.; Can., 36 in.) idea of a real good floribunda. Growth is erect and the flowers a dream. Flowers have real hybrid tea shape and like 'Perfecta' in miniature. Was in bloom all season in good-sized clusters. This variety is a compliment to the garden and the hybridizer—have ordered more stock.

SUMATRA, Fl. (Mallerin '56). Mr. Clark (1 pl.; 3 yrs.; 28 in.) advises, last year 'Sumatra' was a riot of colour all season and attracted much attention; in the hot summer this year bloom was not as free. Mrs. Steinbergs (1 pl.; 1 yr.; Mult., 18 in.) was surprised with the vigorous growth of this variety and its wonderful reddish disease-free foliage. The big semi-double orange-red blooms were in clusters that practically covered the bush. An eye-catcher—will increase her stock.

SUMMERTIME, H. T. (Boerner '57). 'Always good the first year,' states Mr. Clark (2 pls.; 1 and 3 yrs.; 36 in.). Flowers are dainty of a medium pink good for corsages, has floribunda habits. Fragrant with slight susceptibility to Mildew. Prof. MacAndrews (1 pl.; 1 yr.; Mult., 36 in.) comments: 'A small rose that has nice shape and colour—good for the house but not for the show table.' Mr. Parker (2 pls.; 1–2 yrs.; Can. and Mult., 36 in.) reports a good bush that blooms well—well-shaped flower with fragrance.

SUNDANCE, Fl. (Poulsen '54). This variety was not hardy for Mrs. Antoft (3 pls.; 2 yrs.; Mult.), and while it has outstanding tall growth with many blooms that last well as cut flowers, she will discard. Mr. Bryans (2 pls.; 1 and 2 yrs.; Mult., 24 in.) reports a rather thin plant with thin foliage. The flowers, a coppery pink and yellow, being bright and attractive. Mr. Cadsby (1 pl.; 3 yrs.; Mult.) has revised his opinion of this one. He takes his hat off to its vigour, hardness and prolific bloom production, he says: 'If only I liked the bloom.' Mr. Parker (3 pls.; 3 yrs.; Mult.) is getting good results from this rose. For him it is a tall, free blooming variety that shows up well in the border; however, the petals spot in the rain. Mr. Stollery dislikes the way a pretty yellow bloom opens to a dirty pink. He thoroughly dislikes changeable roses.

SUN KING, H. T. (Meilland. Int. C.-P. '54). Mr. Clark (1 pl.; 1 yr.; 48 in.) reports a compact upright bush, blooms a lovely yellow with wild rose fragrance, unfortunately many blooms opened lopsided.

SWEET REPOSE, Fl. (de Ruiter, Gandy '55, C.-P. '56). 'This rose is a darling,' comments Mr. Bryans (1 pl.; 1 yr.; Mult., 42 in.). Tall, strong growth with good foliage which is disease-resistant. Flowers lovely both in form and colour, floriferous. Mr. Buchanan (1 pl.; 2 yrs.; Can.) lost two in the 'deep freeze' of last winter, doubts the hardness of this variety but admits the flowers are lovely. Mrs. Gallagher (3 pls.; 2 yrs.; Can., med.) advises that this pretty rose was a disappointment this year. Petals had a blotched appearance due to excessive heat. For Mr. Parker (2 pls., 1 yr.; Mult., 36 in.) it is a very pretty hybrid tea shaped bloom, blooms well all season.

TABARIN, Fl. (Gaujard '56). This variety appealed to Mr. Buchanan (2 pls.; 1 yr.; Can.); a tall growing plant with the prettiest foliage he had seen on a floribunda. Blooms in very large clusters which he thinks are too crowded to give good effect. The colour a combination of cream, orange yellow, red and pink.

TAMBOURINE, Fl. (A. Dickson '59). Mr. Norton (2 pls.; 1 yr.; Can.) advises bloom production not as good as expected; however, appears to be more disease resistant than some other varieties. It was a strong grower for the writer (1 pl.; 1 yr.; Can., 27 in.), excellent foliage that was disease free. Colour of bloom carmine red with yellow reverse—few blooms in its first year.

TANYA, H. T. (Boerner '59). Prof. MacAndrews (3 pls.; 1 yr.; Mult., 36 in.) reports a good plant with sturdy stiff stems and fine foliage. Medium size bloom of an orange-apricot tint. Excellent in spring but very ordinary during summer—needs more petals. Should be in demand on account of its colour.

TEXAN, Fl. (Lindquist '56). Performed well for Mr. Clark (1 pl.; 3 yrs.; 33 in.), a tall vigorous bush free of disease. The red buds have hybrid tea form and are a nice size for a floribunda. They are long lasting and fragrant. Mr. Haslett (1 pl.; 1 yr.; Mult., 30 in.) agrees with Mr. Clark as to the qualifications of this variety.

THAIS, *see* LADY ELGIN

TIFFANY, H. T. (Lindquist '54). The best year yet for this good rose, is the report of Mr. Selwood (6 pls.; 4 and 5 yrs.; Mult.): can be relied upon to deliver first-class blooms when others are non-existent. An excellent rose, says Mr. Bryans (1 pl.; 1 yr.; Mult., 42 in.). Tall strong growth and plenty of good disease-resistant foliage. Growth and bloom not up to former years for Mr. Billington (1 pl.; 3 yrs.; Mult., 36 in.) due to conditions last winter and this hot summer. Mr. Cadsby (2 pls., 1-3 yrs.; Mult.) comments: 'A fine pink variety sometimes up to exhibition standard.' One of the most dependable roses in Mr. Clark's garden (2 pls.; 1 and 4 yrs.; 48 in.). Produces a dozen perfect blooms at a time all sweetly scented, would like more bloom. Mrs. Gallagher (1 pl.; 2 yrs.; Can., tall) remarks: 'Such a lovely rose, fragrant pink and so slow in its bloom.' For Mr. Jubien (2 pls.; 2-5 yrs.; Mult., 30 in.) the quantity and size of bloom is improving each year. Mrs. Murdoch (2 pls.; 3 yrs.; Mult.) likes this rose and the rose loved the climate in Vancouver. Had lovely fragrant pink blooms. 'My favourite rose,' declares Mrs. Naismith (4 pls., Mult.) always in bloom and has no bad habits. Excellent foliage. It was the best rose in Mr. Palmer's garden (3 pls.; 4 yrs.; Mult.). Beautiful buds and the foliage is good plus perfume. Mr. Parker (2 pls.; 2 yrs.; Mult.) is in accord with all the praise given this variety.

TINKER BELL, Min. (de Vink '54). Mr. Wilson (1 pl.; 3 yrs.; own root, 8 in.) reports this variety has a spreading habit with open growth. The blooms are a clear pink having good hybrid tea form usually in clusters of several blooms. Bloom heavy but intermittent.

TOM-TOM, Fl. (Lindquist '57). Mr. Butwick (1 pl.; 1 yr.; Mult., 24 in.) considers this rose one of the nicest in the pink colour range. The buds are a deep crimson that open to a clear pink on an average size plant. Clusters generally have four to five flowers.

TORCH SONG, H. T. (Meilland, C.-P. '59). Mr. Clark (1 pl.; 1 yr.; 32 in.) advises this is a disease-resistant compact plant bearing brilliant orange-red blooms with good form. They open a little fast for exhibition purposes. Mr. Selwood (1 pl.; 1 yr.; Mult.) describes the colour of the blooms as vermilion with smoky red reverse, is fragrant but not sufficient blooms. Its leathery foliage is of fair quality—some Black Spot.

TWILIGHT, H. T. (Boerner '55). Mr. Parker (1 pl.; 3 yrs.; Mult., 24 in.) is still dubious about this rose, finds it has short petals and is usually a poor colour. Mr. Clark (1 pl.; 4 yrs.; 34 in.) keeps 'Twilight' for the colour and occasional good blooms. He was rewarded with a blue ribbon this year, the rose being rated as one of the best ten hybrid teas in the show. Has improved over former years. Prof. MacAndrews (1 pl.; 1 yr.; Mult., 20 in.) can find no redeeming features, and will discard it—'another lavender that is not a pleasing colour'. Mr. Selwood (1 pl.; 1 yr.; Mult.) points out that it requires perfect growing weather to be even passable.

TZIGANE, H. T. (Meilland, Int. U.S.A. by Hennessey '56). Mrs. Wilson (1 pl.; 1 yr.; Mult., 24 in.) reports that the plant is low and bushy with glossy attractive foliage and is floriferous. Inside petals of the bloom are salmony red, the outside a golden yellow. A striking colour, the bloom lasting longer than most varieties of this colour. Mrs. Meiklejohn (1 pl.; 1 yr.; Can.) finds the buds most attractive; however, the blooms fade quickly.

WHITE BOUQUET, Fl. (Boerner '56). Mr. Rhodes (1 pl.; 1 yr.; Mult.) reports a medium healthy grower and thinks it has a future. For Mr. Parker (2 pls.; 1 yr.; Mult., 24 in.) it has bloomed well, the blooms being large. He would place it second to 'Irene of Denmark'. Mr. Selwood (1 pl.; 2 yrs.; Mult.) ranks it with 'Irene of Denmark' and 'Glacier', no better, no worse. Mrs. Steinbergs (9 pls.; 1-2-3 yrs.; Mult., 18 in.) finds this variety to be a slow grower, and while the blooms are large creamy-white, fragrant and in clusters, there is not sufficient for a floribunda. If there are no better results next year, will discard it. Maybe this variety does not like the weather in Newfoundland.

WHITE KNIGHT, H. T. (Meilland, U.R.S. '55, C.-P. '57). Mrs. Baillie (2 pls.; 2 yrs.; Mult.) reports very little growth, the blooms very nice, but few of them. For Mr. Billington (1 pl.; 2 yrs.; Mult., 36 in.) the growth and bloom were excellent with the fault the bloom opened too rapidly. Mr. Cadsby (2 pls.; 2-3 yrs.; Mult.) has his doubts about this variety for exhibition purposes: however, he feels it is a fine addition to white garden roses. A tall vigorous bush, advises Mr. Clark (2 pls.; 1-2 yrs., 36 in.) while the colour is at times greenish it is his best white for form. Bloom production good. Mr. Dufton (3 pls.; 3 yrs.; Mult.) is enthusiastic, calls it one of the better garden varieties—a real good one. Mrs. Gallagher (1 pl.; 2 yrs.; Can., med.) is not enthusiastic, has so far a few elegant blooms on a slim bush. Seasons performance was poor for Mrs. MacDonald (1 pl.; 2 yrs.; Mult., 33 in.); while the buds are well-shaped and the blooms of pure white are very large, the bloom is very untidy in appearance after it is fully open. Mrs. Marshall (1 pl.; 2 yrs.; Mult.) still thinks this rose a very fine white hybrid tea but prefers 'Virgo'. Performed well this season. Overrated in the opinion of Mrs. Naismith (2 pls.; Mult., 36 in.); a lovely bud, but does not compete with either 'Misty Morn' or 'Burnaby' for exhibition purposes. Mr. Norton (1 pl.; 2 yrs.; Can.) obtained two good blooms in June, nothing worthwhile thereafter. While this variety did not seem to have any bad habits, Mr. Palmer (2 pls.; Mult.) was a little disappointed with the size of the bloom. The best white, declares Mr. Parker (4 pls.; 1-3 yrs.; Mult.); has large exhibition blooms freely produced, which are long lasting when cut. Has good healthy foliage. It can be magnificent at times, comments Mr. Selwood (1 pl.; 1 yr.; Mult.) but day in and day out he prefers 'Virgo'. Calls it a Mildew slave.

WHITE QUEEN, H. T. (Boerner '48). Mrs. Marshall's (1 pl.; 1 yr.; Shaf.) was planted too late to give a complete report this year. She advises it has good foliage and a beautifully shaped bud which opens slowly, still looking fresh and pretty when fully opened.

WILDFIRE, Fl. (Swim '55). This single floribunda is one of the favourites of Mr. Clark (1 pl.; 4 yrs.). It is thorny and has bronze foliage with never a hint of disease. A prolific bloomer, almost always in bloom. Mr. Haslett (1 pl.; 2 yrs.; Mult., 32 in.) reports a free blooming vigorous bush with brilliant red-coloured blooms that are long lasting. To this Mr. Parker (1 pl.; 1 yr.; Mult., 36 in.) fully agrees.

YELLOWHAMMER, Fl. (McGredy '56). This variety did nothing for Mr. Norton (1 pl.; 3 yrs.; Can.) during last season, is tempted to discard. Mr. Parker (3 pl.; 3-4 yrs.; Can. and Mult., 12 in.) reports very poor growth; however, there was abundant bloom of a good colour. Fades in the sun. Mr. Rhodes (1 pl.; 2 yrs.; Mult.) admits that it has dwarf bushy growth, the bloom a good deep orange and while not a free bloomer he likes the rose. Mr. Stollery's plants lacked gumption and gave up the ghost in last winter's 'deep freeze'. For the writer (2 pls.; 3 yrs.; Can., 18 in.) it took three years to become properly established, it is a low grower; however, the light-green foliage is healthy. I like the colour of the blooms which are different from any other floribundas—bloom production moderate.

ZITRONENFALTER, S. (Tantau '56). Mr. Buchanan (1 pl.; 1 yr.; Can.) reports strong growth—plant going to between 6 and 7 ft. There were only two blooms, the colour being about the same as 'Ethel Sanday'. Appears to be disease-resistant, needs another year to prove itself.

The Constitution and By-Laws

ARTICLE I—THE NAME: The name of the Society, which was organized in the year one thousand nine hundred and thirteen, as the Rose Society of Ontario, shall be The Canadian Rose Society, and shall be referred to herein as the Society.

ARTICLE II—PURPOSES: The objects (purposes) of the Society shall be to further the study of roses, to promote the cultivation thereof, and the Society in its functioning shall seek to discover and disseminate knowledge of the conditions favourable to the culture of roses throughout Canada. In doing so, the affairs of the Society shall be conducted in such a manner as not to result in pecuniary gain or profit to any of its members.

ARTICLE III—MEMBERSHIP: Membership in the Society, subject to approval by the Board of Directors, shall be open to any person, organization or corporation interested in roses and in their culture, and who is willing to conform to the conditions concerning membership. Affiliate membership shall be open to horticultural and other rose societies under the conditions of the By-Laws.

ARTICLE IV—MANAGEMENT: The management of the Society shall be vested in a Board of Directors, who shall be elected from the members of the Society at the Annual Meeting of the Society, in accordance with the procedures as provided in the By-Laws of the Society.

ARTICLE V—ANNUAL GENERAL MEETING: There shall be held each year in the month of October, a general meeting, to be known as the Annual General Meeting, of the members of the Society, at which requisite business as indicated by the By-Laws, and matters of general interest may be discussed and resolved upon.

ARTICLE VI—GENERAL MEETING EXTRAORDINARY: A general meeting extraordinary, or Special General Meeting, of the members of the Society may be held according to the provisions specified in the By-Laws.

ARTICLE VII—QUORUM OF THE GENERAL MEETINGS: Fifty members of the Society shall constitute a quorum at every general meeting whether Annual or Extraordinary.

ARTICLE VIII—CHANGES IN THE CONSTITUTION AND BY-LAWS: Changes in the Constitution and By-Laws may be resolved according to By-Law, due notice having been given to every member of the Society, and the provisions within the By-Laws being duly observed.

ARTICLE IX—GENERAL PROVISIONS: The By-Laws shall include direction as to:

1. The seat of the Society: the fiscal and membership year thereof; the classes of membership and fees thereof; and direction as to the acceptance, rejection or revocation of the membership of any person or organization.
2. The manner of voting by members of the Society and of the Officers and Directors thereof.
3. The nomination and election of a Board of Directors, of the Officers of the Society, and appointments of the Standing Committees thereof, and a statement of the length of time for which those elected may hold office.
4. A statement concerning the number composing the Board of Directors, including the Regional Directors and the duties, powers and responsibilities thereof, and provision for their resignations and replacements.
5. Provision for the method of deciding on matters within the scope of an Annual General Meeting, or of a General Meeting Extraordinary.
6. The affiliation of other organizations with the Society, and the affiliation of the Society with other organizations.
7. The election of Auditors and the number thereof; the creating of honorary offices and the awarding of titles.

BY-LAWS

SECTION 1. The seat of the Society shall be in The Municipality of Metropolitan Toronto.

SECTION 2. The fiscal year of the Society shall be from the first day of October in each calendar year to the thirtieth day of September in the next calendar year.

SECTION 3. The membership year shall be the calendar year and all fees for the renewal of memberships shall be due and payable in the month of January in each year.

SECTION 4. CLASSES OF MEMBERSHIP AND FEES: There shall be the following classes of membership in the Society, for which the fees shall be as stated opposite each class in the following table:

	<i>For One Calendar Year</i>	<i>For Three Calendar Years</i>
Regular . . .	\$3.00	\$ 8.50
Sustaining . . .	5.00	14.50
Affiliate . . .	6.00	17.50
Life	\$75.00	

SECTION 5. THE QUALIFICATIONS OF APPLICANTS FOR MEMBERSHIP: Whether of persons or of organizations may be reviewed and passed upon for acceptance by the Board of Directors, or by any person or persons appointed by the Board to do so.

SECTION 6. The membership of any person or organization may be rejected or revoked by The Board of Directors for just cause.

SECTION 7. VOTING BY MEMBERS: Each regular, sustaining, life and affiliate member of the Society shall be entitled to one vote in any election by members of the Society in any matter to be resolved upon by them.

SECTION 8. BOARD OF DIRECTORS:

(a) The Board of Directors shall consist of twenty (20) members each of whom shall hold office for one year or until successors are elected. All members of the Board shall be eligible for re-election.

(b) The Directors shall be elected by a plurality vote by ballot of the members at large.

(c) Nominations for the Board of Directors shall be made by the Nominating Committee, whose report (list of 20 nominated members) will be sent by the Secretary by mail to each member of the Society at least 60 days prior to each Annual Meeting. It shall be the privilege of any member of the Society to nominate any other member of the Society as a Director, other than and in addition to the twenty nominated by the Nominating Committee. Such additional nominations must be signed by the proposer and the seconder, and in all cases must require the consent of the member concerned to act if elected and must be returned to the Secretary not later than forty (40) days prior to the date of each Annual Meeting. The Secretary shall send by mail at least twenty (20) days prior to each Annual Meeting a report (list of nominations) to each member only in the event additional nominations are made.

(d) In the event that the only nominations to the Board of Directors are those made by the Nominating Committee, those members shall, at the Annual Meeting, be declared elected. In the event any member or members have been nominated, pursuant to Section 8(c) balloting shall be held at the Annual Meeting, all members present at the Annual Meeting and all members having requested proxy ballots, being entitled to vote. In balloting for Directors ballot paper with the name of the Society imprinted thereon and the names of the twenty nominees of the Nominating Committee, together with the names of any additional nominees submitted by the members, shall be used. These ballot papers will be distributed at the Annual Meeting by the Secretary. Members availing themselves of this opportunity of electing a Board of Directors of their choice should mark these ballot papers in the customary manner—an X opposite the names of the twenty nominees they favour, and deposit their ballot with the Secretary at the Annual Meeting. Upon the declaration by the Secretary that the balloting has been concluded no further ballots will be received, and the Secretary will proceed to count and record the ballots and the twenty nominees receiving the highest number of votes shall be elected.

(e) Any member who cannot, for any reason, attend the Annual Meeting may, within thirty (30) days prior to the Annual Meeting, request by prepaid post, addressed to the Secretary, that he be issued a proxy ballot. Upon receipt of a request for a proxy ballot within the proper time, the Secretary shall forward such ballot to the member requesting one and such ballot will be counted in the balloting for Directors, provided it is properly marked and returned by prepaid post addressed to the Secretary and received by the Secretary not later than seven (7) days prior to the Annual Meeting.

SECTION 9. DUTIES OF THE BOARD OF DIRECTORS: The Board of Directors shall, within the scope and authority of the Constitution and these By-Laws, perform all executive and administrative duties in the management of the affairs of the Society, and appoint all officers and all chairmen of committees except that of the Nominating Committee and the Auditors.

SECTION 10. REGIONAL DIRECTORS: Canada is divided into seven (7) districts or regions as follows:

1. British Columbia
2. Alberta and Saskatchewan
3. Manitoba and North-western Ontario, to the Lakehead
(Fort William-Port Arthur)
4. Remainder of Ontario
5. Quebec
6. New Brunswick and Nova Scotia
7. Prince Edward Island and Newfoundland

Regional Directors from each region, as the circumstances warrant, may from time to time be appointed by the Board of Directors at any regularly constituted meeting of the Board of Directors from the members resident in their respective regions to hold office for one year, and all such members shall be members of the Regional Director's Committee. Nominations for appointment as a Regional Director for his region may be made by any member of the Society to the Secretary together with written consent of the person so nominated to act, and a statement signed by the nominator of the qualifications of the nominated member for the position; and such nomination shall be considered by the Board of Directors at the meeting following receipt of such nomination by the Secretary.

SECTION 11. DUTIES OF REGIONAL DIRECTORS:

(a) To encourage, improve and extend the cultivation of the Rose by disseminating knowledge of the conditions favourable to the culture of the Rose.

(b) To establish and maintain contact with the members resident in their respective regions.

(c) To assist the Board of Directors with suggestions for improvement of the Society.

(d) To attend meetings of the Board of Directors whenever possible.

SECTION 12. OFFICERS: The officers of the Society shall be a President, four Vice-Presidents, a Secretary, an Assistant-Secretary, and a Treasurer. These officers shall be elected by the Directors. In the election of officers a majority vote of the Directors present (or represented by consent at the Directors' Meeting called for this purpose) shall be deemed to elect each officer. No person shall be elected to the office of President of the Society for more than two (2) years in succession, and a period of two (2) successive years shall intervene between any terms of office so held. The President, Vice-Presidents, Secretary and Treasurer shall be *ex-officio* members of all committees.

SECTION 13. DUTIES OF OFFICERS: The specific duties and responsibilities of the Society's officers, i.e. President, Vice-Presidents, Secretary, Assistant Secretary and Treasurer, will be drawn up in the form of a directive

by the Board and given each newly elected officer for his or her information and guidance.

SECTION 14. VACANCIES: When a vacancy occurs in the Board of Directors, or in any office of the Society, such vacancy may be filled by the Board for the unexpired term.

SECTION 15. BANKING:

(a) The funds of the Society shall be deposited in such chartered Bank or Banks, or other financial institutions as may be approved from time to time by the Board.

(b) The funds of the Society shall be approved for disbursement by the Board of Directors upon vouchers submitted by the Society member authorized by the Board as responsible for the activity involved.

(c) All cheques drawn on the funds of the Society shall require the signature of the President, or a Vice-President, together with that of the Treasurer, provided always that no one officer can sign in two capacities.

(d) Any surplus funds of the Society may be deposited in special interest-bearing accounts in such chartered Bank or Banks, or other financial institutions, or be invested in such securities as may be approved by the Board of Directors.

SECTION 16. STANDING COMMITTEES:

(a) Nominating Committee: The President and the four Vice-Presidents, together with the immediate Past President, shall constitute the Nominating Committee whose duty it shall be to prepare a slate of nominations for the Board of Directors for circulation by the Secretary as prescribed in By-Law Section 8(c). The immediate Past President shall be the Chairman of the Nominating Committee.

(b) Advisory Board: Consisting of ten (10) members, not necessarily Directors (except the Chairman) shall be appointed by the President each year. This Board, which will be selected from experienced Rosarians across Canada, will be available to the membership at large for consultation and will assist the members in all phases of Rose culture, without charge.

(c) Auditors: The auditors shall be two (2) in number, duly elected at the Annual Meeting, and it shall be their duty to audit the financial records of the Society and report to the members at the Annual Meeting, for the fiscal year being covered.

SECTION 16A. OPERATING COMMITTEES: The Board of Directors shall appoint from among its members, a Chairman for each of the following Operating Committees, such Chairmen selecting their committee members from other Directors, or/and members in good standing in the Society. Each of these operating committees shall be responsible to the Board of Directors and shall hold office for the fiscal year.

- (a) Regional Directors' Committee, which shall be composed of a Chairman and all Regional Directors
- (b) Membership Committee
- (c) Publicity Committee
- (d) Exhibition Committee

- (e) Publications Committee
- (f) Trophy Committee
- (g) Mailing Committee
- (h) Advertising Committee

Additional Operating Committees may be appointed by the Board of Directors from time to time as the need arises.

SECTION 17. MEETINGS

(a) The Annual Meeting of the Society for the election of Directors and Auditors for the ensuing fiscal year, the presentation of the President's and Treasurer's reports, and for the transaction of such other business as may properly come before the meeting, including any special reports from the Board of Directors relating to the activities and management of the Society, shall be held in the month of October in each year.

(b) A special General Meeting of the Society shall be called at any time by the President upon authorization by the Board of Directors, or upon a request for such meeting made to the President in writing, by twenty-five (25) or more members.

(c) Voting and Quorum: At all regularly constituted meetings of the Society each member present (or who not being in attendance has filed his or her signed proxy in favour of the President or a Vice-President), shall be entitled to one vote. Fifty (50) members shall constitute a quorum (see Article VII, Constitution) seven (7) Directors shall constitute a quorum at any meeting of the Board of Directors.

(d) Notice of Meetings: Notice of any Annual or Special General Meeting of the Society shall be mailed by the Secretary to every member at least fourteen (14) days in advance of the date called. Notice of any Directors' meeting shall be mailed to each Director by the Secretary at least ten (10) days in advance of such meeting.

SECTION 18. AFFILIATIONS—AFFILIATION BY OTHER SOCIETIES: The Society may accept applications for affiliation by Horticultural Societies or by Rose Societies upon qualification thereof under either one, or under both, of the following options:

Option 1 (with the Silver Medal): Upon the application for membership in the Society by ten (10) or more members of the society applying for affiliation which application shall be forwarded by such society, or

Option 2 (with the Bronze Medal): Upon the payment of an annual membership fee of six dollars.

In the case of Option 1, the affiliated society shall be entitled to a silver medal, and in the case of Option 2, a bronze medal of The Canadian Rose Society, to be offered as a prize for competition in the Affiliated Society Rose Show, or in the rose section of its flower show, as the case may be; provided however that there shall be at least three exhibitors in competition for either one of the medals.

Other benefits to the affiliated society shall include one copy of each of the Society's publications in each year of affiliation, mailed to the person designated by the affiliated society to receive them.

SECTION 18A. AFFILIATION WITH OTHER ORGANIZATIONS: The Society may become affiliated with such other organizations as the Board of Directors may determine.

SECTION 19. ROSE EXHIBITIONS: Shall be held in Metropolitan Toronto at such dates and places as the Directors may appoint, and rose exhibitions may be held at such other places in Canada as the Directors may determine, and prizes may be awarded at all such exhibitions.

SECTION 20. BRANCHES: The members of the Society in any town, city or regional district (as defined in By-Law 10) in Canada, may, with the approval of the Board, appoint a committee for such city, town or regional district, and may elect a presiding officer thereof to be called the (name of city, town or regional district) Vice-President, for the management of local affairs of the Society not inconsistent with the Constitution, and these By-Laws, and members so acting may adopt the name of The Canadian Rose Society (name of city, town or regional district) branch.

SECTION 21. HONORARY OFFICES AND TITLES: The Board of Directors may elect from among the members of the Society, in recognition for outstanding services, an Honorary President, four Honorary Vice-Presidents, and Honorary Directors not to exceed ten (10) in number, each to hold office for one fiscal year and be eligible for re-election. The Honorary President may be a member of the Board of Directors *ex-officio*.

SECTION 22. CHANGES IN THE CONSTITUTION AND BY-LAWS: Any article of the Constitution, or any section of these By-Laws, may be amended or repealed, and any Article or Section may be added thereto, at the Annual Meeting of the Society or at a Special General Meeting called for this purpose, by a two-thirds vote of the members present or represented by proxy. A copy of proposed amendments or additions to and deletions from the Constitution or By-Laws must be submitted to each member, together with notice of the Meeting, as provided in these By-Laws.

Index to Advertisers

	<i>Page</i>
Alpenglow Gardens	214
Anderson-Smythe Ltd.	208
B.A.	221
Birks, H., and Sons (Ontario) Ltd.	214
Brookdale-Kingsway Nurseries	221
Cadsby, M. A.	215
Canadian Bank of Commerce	222
Canadian Oil Companies Ltd.	225
Connon, John, Nurseries	220
Cruikshank, C. A. Ltd.	214
Cyanamid of Canada Ltd.	223
Dickson, Alex. and Sons Ltd.	217
Dixon-Reid Co. Ltd.	217
Dunlop	212
Duplate (Canada) Ltd.	224
Eaton, T., Co. Ltd.	205
Eddie's Nurseries	219
Ellesmere Nurseries	215
Feltz, G. Van der	209
Garden Club of Toronto	215
High Park Rose Specialists	218
Imperial Bank	219
Keith, Geo. and Sons Ltd.	209
Kraus, V., Nurseries	216
Leaside Memorial Community Gardens	226
Lord and Burnham	213
McConnell Nursery Co. Ltd.	227
Pallek, Carl and Son	214
Parker Pens	226
Perron, W. H. and Co. Ltd.	222
Plant Products Co.	206

INDEX TO ADVERTISERS (*continued*)

	<i>Page</i>
Rennie, Wm., Seeds Ltd.	216
Rosecroft Nurseries	211
Rowen Press Ltd.	208
Sheridan Nurseries	228
Simpson, Robt., Co.	223
Stone and Wellington Ltd.	214
Superior Bulb Co. Ltd.	226
Swift Canadian Co. Ltd.	209
Teolis, A., Ltd.	220
Toronto-Dominion Bank	220
Upjohn Co., The	210
Watts, Frank, Sod and Seed Supply	212
Whitman, C. B.	208
Wiebicke, Bert	226
Wilkinson Sword Ltd.	207

VISIT TO EATON'S "Garden Grove"

CAN MAKE YOUR GARDEN

A "COMPLIMENT WINNER"

PLANTS, SHRUBS, SEEDS

One of Toronto's most complete selections of shrubs and roses, including award-winning All-American selections. Grass, flower and vegetable seeds ... assorted fertilizers.

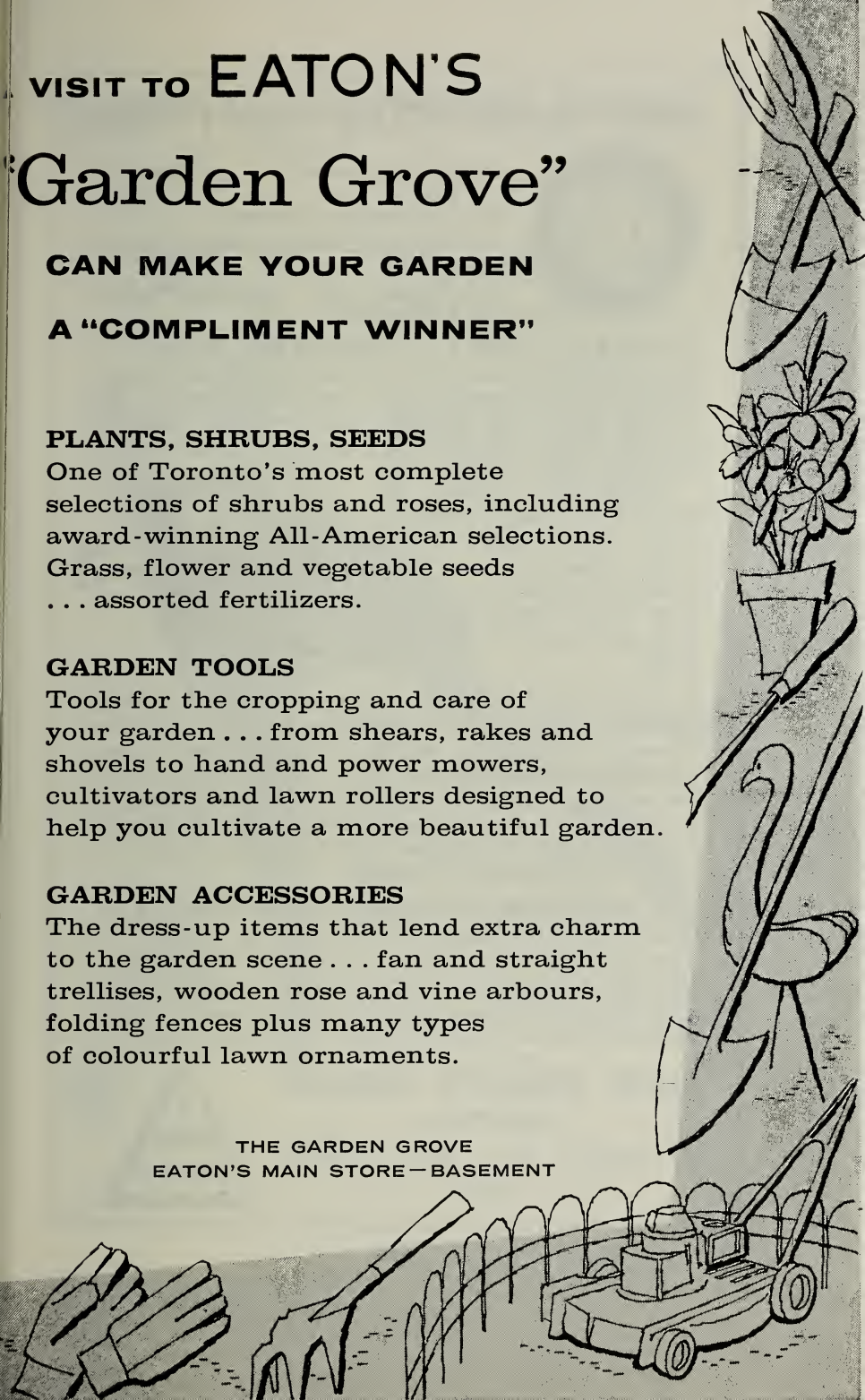
GARDEN TOOLS

Tools for the cropping and care of your garden ... from shears, rakes and shovels to hand and power mowers, cultivators and lawn rollers designed to help you cultivate a more beautiful garden.

GARDEN ACCESSORIES

The dress-up items that lend extra charm to the garden scene ... fan and straight trellises, wooden rose and vine arbours, folding fences plus many types of colourful lawn ornaments.

THE GARDEN GROVE
EATON'S MAIN STORE—BASEMENT



COMPLETE ROSE PROTECTION AND FEEDING



WITH

PROTEXALL SPRAY or PROTEXALL DUST

PLANT ROTARY DUSTER

PLANT PROD 20-20-20 INSTANT PLANT FOOD

SEA+MAGIC 100% ORGANIC PLANT STIMULANT

PROTEXALL SPRAY or PROTEXALL DUST

A powerful combination of insecticides and fungicides that will protect roses and other flowers and shrubs from most insects and diseases such as aphids, mites, rose chaffers and others, as well as black spot and mildew.

PLANT ROTARY DUSTER

This light-weight aluminium rotary duster throws an 8-ft. stream of dust in an ever continuous flow. Dusts 200 bushes with one filling of PROTEXALL DUST.



PLANT PROD 20-20-20 INSTANT PLANT FOOD

Special rose fertilizer and all round plant food for flowers, vegetables, shrubs, trees, lawns, house plants and transplanting—and so easy to apply. This is a new type of instantly soluble plant food that feeds through the leaves, as well as the roots. It goes to work instantly it touches the foliage and will not harm even the tender growth.

SEA+MAGIC 100% ORGANIC PLANT STIMULANT

Now—from the famous British firm of CHASE, we offer for the first time in Canada—NEW SEA+MAGIC. A completely organic leaf spray plant food, SEA+MAGIC stimulates flowers, vegetables, shrubs and lawns to use all the nutrients available in the soil.

PLANT PRODUCTS COMPANY LIMITED

70 WESLEY AVE., PORT CREDIT,
ONT.



Make your gardening easy

get a



PRUNER



**W.40
KNIFECUT
PRUNER**

Unique FLOATING BEARING for effortless ease

The most efficient pruner ever produced. Perfectly balanced with light alloy handles specially designed to fit the hand. Note the unique double floating bearings. One holds the blades together and prevents twisting; the other gives the cut its smooth, sliding action. The blades are rust-resisting, of course, and a groove is provided in the holding blade to drain off sap and stop the blades sticking together. The neat flick catch operates a hidden spring to open the pruner.



WILKINSON SWORD LIMITED · LONDON · ENGLAND

Canadian Agent:

**JOHN A. HUSTON LIMITED,
36 CALEDONIA ROAD, TORONTO, 10**

California grown Rose Bushes

ARE THE BEST

Richer soil, dependable weather, controlled watering at all seasons, a ten month growing season, mass production, all add up to produce a heavier, sturdier, better grown plant with stored up energy for heavier bloom production. If you want the best, this is where the best is produced.

Armstrong Nurseries, one of the world's outstanding rose growers, offer their California grown rose bushes through Canadian distributors. As these roses are shipped in air conditioned cars to retailers here, they arrive in perfect condition, much better plants than you can get by ordering direct from the growers, and with far less trouble.

Order your California grown rose bushes from Canadian dealers—their names furnished on request. Write to:

C. B. WHITMAN

Canadian Resident Agent for Armstrong Nurseries of Ontario, California

Address: 18 Pelmo Cr., Weston, Ont.

Telephone CH 1-3836

Rowen Press Limited

"Printing That Pleases"

HUDSON

PRINTERS · STATIONERS · OFFSET

9-1197

— RUBBER STAMPS —

116 LAIRD DRIVE

LEASIDE, ONT.

ANDERSON - SMYTHE - LIMITED

GENERAL CONTRACTORS AND ENGINEERS

154 Merton Street

Toronto 7, Ontario

Schools, Churches

Offices, Factories and Institutions

FELCO

*Pruning shears of
World Reputation*



Features:

Clean, non bruising
cut
Non pinching safe-
ty lock
Non slipping
fingergrrips
Light-weight, 9
ounces
Replaceable and
adjustable blades
Will last another
generation
Price \$4.45

*Orders and infor-
mation:*

G. Van der Feltz

Box 95 Clarkson, Ont.
Phone TA2-0149.

KEITH'S SEEDS

*Specialists in Fine Seeds
Flowers and Vegetables*

For a Complete Line of
GARDEN SUPPLIES

Visit our
GARDEN CENTRE
Yonge St. Thornhill

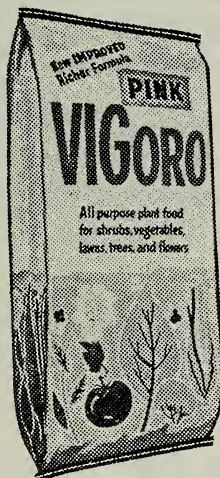
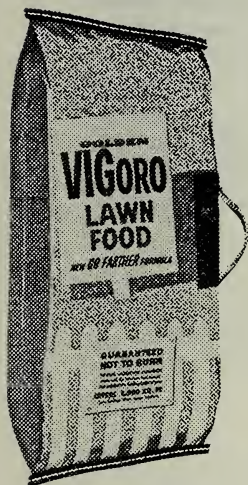
Send today for 1960 catalogue

Geo. Keith & Sons Ltd

124 King St. E., Toronto 1

Phone EM. 6-5871

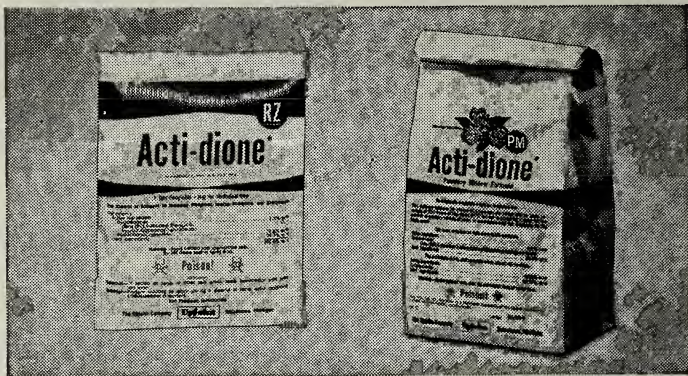
Seed Merchants Since 1866



*NEW
in
1960*

SWIFT CANADIAN CO. LIMITED
AGRICULTURAL CHEMICAL DIVISION
TORONTO 18, ONTARIO

ANTIBIOTIC CONTROL FOR LAWN, SHRUB, AND FLOWER DISEASES



Acti-dione RZ controls **8 common lawn diseases** found on Kentucky bluegrass, Merion bluegrass and bentgrass lawns. Also suggested for use on Bermuda and St. Augustine grasses.

Acti-dione PM for powdery mildew control on **rose, chrysanthemum, Euonymus, crape-myrtle, phlox, zinnia, tuberous begonia and honeysuckle.**

Upjohn

CHEMICAL SALES DIVISION • THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN

Available at your neighborhood retail outlet through the distribution facilities of:

PLANT PRODUCTS COMPANY LTD.

70 WESLEY AVENUE
PORT CREDIT, ONTARIO

COCK BROTHERS, LTD.

340 PITT STREET, EAST
WINDSOR, ONTARIO

Rosa Canina Understock



Proven the Best—By Amateur Test

The most critical of all Tests

These plants have proven superior against various other understocks in tests, such as; The Glen Hall Project, Toronto University, The Phoenix Rose Society Amateur Test Ground, Phoenix Arizona. Also the very outstanding severe winter conditions of 1958–59, and the alkaline soils of eastern Canada and U.S.A.

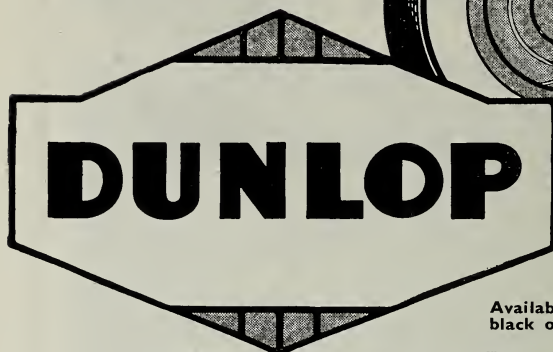
COMPARISON HAS PROVEN AGAIN
FOR ACCLIMATIZED CANADIAN ROSE BUSHES

ROSECROFT NURSERIES

Box 14, R.R. 7

LANGLEY, B.C.

You can bet
your life
on



Available in conventional or tubeless,
black or white-wall, rayon or nylon

Gold Seal

NEW STANDARD OF TIRE EXCELLENCE

Creators of Beautiful Lawns

★

Choice cultivated sod; Pasture, Field and Nursery
Cut and delivered fresh daily

Rich Black Loam • Fertilizers • Peat • Shrubs

Rockery, Patio and Sidewalk Stone

★

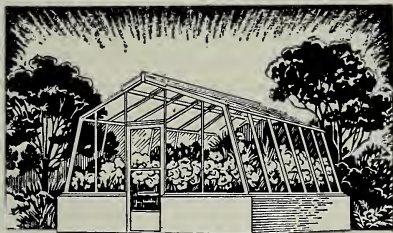
FRANK WATTS SOD & SEED SUPPLY

6441 Yonge Street
Willowdale, Ontario

Baldwin 5-2359

ORLYT

WOOD or ALUMINIUM GREENHOUSES



*Excellent for growing
your Hybrid Roses
or anything else you choose*

Beautiful and bright for a lifetime of carefree gardening. A pride to own. Easy to operate with automatic heat and ventilation. Never needs paint—no putty glazing. Made of aluminium alloyed for greatest strength and resistance to corrosion—the perfect 'forever metal' for greenhouse construction. Send for fascinating Catalogue RS.

LORD & BURNHAM

ST. CATHARINES, ONT.

Stone and Wellington Ltd (The Fonthill Nurseries)

The Original Growers of Hardy, Acclimatized Canadian Rose Bushes
P.O. Box 40 Ridgeville TW. 2-2614 Fonthill, Ontario

KEY—Advertising Service Limited

PRINTING — ADDRESSING — MAILING

ERNIE LOWCOCK
Phone: BA. 1-3433-4

74 SHEPPARD AVE. W.
Willowdale, Ont.

QUALITY GIFTS

FOR

ALL OCCASIONS

BIRKS

JEWELLERS

134 YONGE ST. • 33 BLOOR ST. W.

ALPINES

Dwarf slow growing

Conifers and Shrubs

Unusual Plants

from the world's far corners

Catalogue free

ALPENGLOW GARDENS

13328 Trans-Canada Hwy
New Westminster, B.C.

**ROLGUT
SECATEURS**

The ideal pruners for Roses.
Made in England, awarded
Silver Medal, National Rose
Society

RA - PID - GRO

Amazing new discovery. The
original foliage-feeding
fertilizer

Phone or Write for Catalogue

C.A. CRUICKSHANK LTD

Accessories for Rose growers

BULBS PLANTS SEEDS

1015 Mount Pleasant Road
HUDSON 8-8292 Toronto 12

ROSES

We offer a fine assortment of
reasonably priced high-quality

**CANADIAN GROWN
ROSE BUSHES**

With fast courteous service

Price and variety list
on request

**CARL PALLEK & SON
NURSERIES**

Virgil Box 30 Ontario

Our Nursery is located right
at the Stone Rd. in Virgil
between St. Catharines and
Niagara On The Lake

M. A. Cadsby

BARRISTER AND SOLICITOR

Suite 306
133 Richmond St. W.
Toronto 1, Ont.

Telephone
EMpire 6-9501

ROSES

Ellesmere Nurseries

Brooklin — Ontario

A CANADIAN PRODUCT FOR THE
CANADIAN HOME



CURRENT PROJECTS

THE ENCHANTED GARDENS FOR
CRIPPLED CHILDREN

THE CIVIC GARDEN CENTRE AT THE
EDWARDS GARDENS



NEW ROSES

Besides our wide assortment of standard varieties, we will have the following novelties in bloom this Summer:

Ballet, Chantre, Golden Sun, Pink Duchess, Angel Wings, Tapestry, Pink Peace, Simone, Lyss Asia, Lilly Marlene, Komodore, Meteor, Liebeszauber, and dozens of other outstanding varieties

Visit our nurseries from July on. Send for our complete list

V. KRAUS NURSERIES
CARLISLE, ONT.

(16 miles north of Hamilton)



NEW TRI-GEN 3 in 1 ROSE SPRAY

All year protection against Black Spot, Powdery Mildew, Spider Mites and other insects

8 oz. bottle makes 6 gallons of Rose Spray—\$1.65 Post paid

16 oz. bottle \$2.70 Post paid

32 oz. bottle \$4.80 Post paid

Write for your copy of our 1960 Seed Annual—Free on request

WM. RENNIE SEEDS
LIMITED

151 KING STREET EAST, TORONTO 1, ONTARIO
EMpire 4-9381

DIXON-REID PLANT FOOD

*Makes the amateur gardener
an expert!*

● Used indoors and outdoors by gardeners—for soil treatment, transplanting, nurseries, cut flowers, lawns, trees and shrubs.

Available in 25c, 50c, \$1 and \$1.79 bottles

IMPROVED FERTILIZER FOR TRANSPLANTING

DIXON-REID CO. LTD., TORONTO

OVER A MILLION SOLD



At Florists, Department, Hardware, Grocery, Drug, and 5 and 10c Stores throughout Canada

Hawlmare Roses of world-wide reputation

We hope our recent introductions, especially 'Silver Lining', have given you pleasure

This year we offer 'Goddess', the finest floribunda we have yet produced. You will fall in love with this lovely rosy salmon, sweetly scented new rose

Send for our illustrated catalogue

ALEX. DICKSON & SONS, LTD.

Hawlmare,
Newtownards, Northern Ireland

"THE FINEST IN WORLD FAMOUS ROSES"

HIGH PARK *Rose Specialists*



IN THE SPRING, DORMANT PLANTS
SHIPPED FROM OUR REFRIGERATED STORAGE
OR
VISIT OUR ROSE DISPLAY AT 696 LANSDOWNE AVE.
WHERE

YOU CAN SELECT PLANTS IN BLOOM
WELL ESTABLISHED IN A NEW CONTAINER THAT
WILL DISINTEGRATE WHEN SET IN YOUR GARDEN

Roses Love Compost

Grow Better Roses with Compost
'Nature's Own Way To Fertilize'

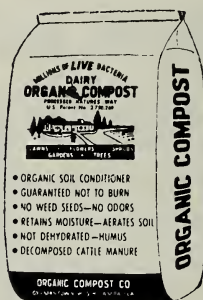
Distributors for These Rose Growing Aids!



STADLER'S Triple XXX Rose Maker

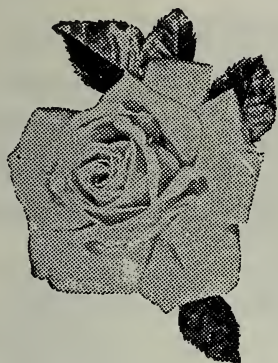
the 3-in-1 rose food
7-8-5 organic base
plus F.T.E.

ORGANIC COMPOST
FERTILIFE
GARDENURE
FERTIE CATTLE MANURE
FERTIE SHEEP MANURE



- ORGANIC SOIL CONDITIONER
- GUARANTEED NOT TO BURN
- NO WEED SEEDS—NO ODORS
- RETAINS MOISTURE—AERATES SOIL
- NOT DEHYDRATED—HUMUS
- DECOMPOSED CATTLE MANURE

ORGANIC COMPOST CO.
1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1090-1091-1092-1093-1094-1095-1096-1097-1098-1099-1100-1101-1102-1103-1104-1105-1106-1107-1108-1109-1110-1111-1112-1113-1114-1115-1116-1117-1118-1119-1120-1121-1122-1123-1124-1125-1126-1127-1128-1129-1130-1131-1132-1133-1134-1135-1136-1137-1138-1139-1140-1141-1142-1143-1144-1145-1146-1147-1148-1149-1150-1151-1152-1153-1154-1155-1156-1157-1158-1159-1160-1161-1162-1163-1164-1165-1166-1167-1168-1169-1170-1171-1172-1173-1174-1175-1176-1177-1178-1179-1180-1181-1182-1183-1184-1185-1186-1187-1188-1189-1190-1191-1192-1193-1194-1195-1196-1197-1198-1199-1200-1201-1202-1203-1204-1205-1206-1207-1208-1209-1210-1211-1212-1213-1214-1215-1216-1217-1218-1219-1220-1221-1222-1223-1224-1225-1226-1227-1228-1229-1230-1231-1232-1233-1234-1235-1236-1237-1238-1239-1240-1241-1242-1243-1244-1245-1246-1247-1248-1249-1250-1251-1252-1253-1254-1255-1256-1257-1258-1259-1260-1261-1262-1263-1264-1265-1266-1267-1268-1269-1270-1271-1272-1273-1274-1275-1276-1277-1278-1279-1280-1281-1282-1283-1284-1285-1286-1287-1288-1289-1290-1291-1292-1293-1294-1295-1296-1297-1298-1299-1300-1301-1302-1303-1304-1305-1306-1307-1308-1309-1310-1311-1312-1313-1314-1315-1316-1317-1318-1319-1320-1321-1322-1323-1324-1325-1326-1327-1328-1329-1330-1331-1332-1333-1334-1335-1336-1337-1338-1339-1340-1341-1342-1343-1344-1345-1346-1347-1348-1349-1350-1351-1352-1353-1354-1355-1356-1357-1358-1359-1360-1361-1362-1363-1364-1365-1366-1367-1368-1369-1370-1371-1372-1373-1374-1375-1376-1377-1378-1379-1380-1381-1382-1383-1384-1385-1386-1387-1388-1389-1390-1391-1392-1393-1394-1395-1396-1397-1398-1399-1400-1401-1402-1403-1404-1405-1406-1407-1408-1409-1410-1411-1412-1413-1414-1415-1416-1417-1418-1419-1420-1421-1422-1423-1424-1425-1426-1427-1428-1429-1430-1431-1432-1433-1434-1435-1436-1437-1438-1439-1440-1441-1442-1443-1444-1445-1446-1447-1448-1449-1450-1451-1452-1453-1454-1455-1456-1457-1458-1459-1460-1461-1462-1463-1464-1465-1466-1467-1468-1469-1470-1471-1472-1473-1474-1475-1476-1477-1478-1479-1480-1481-1482-1483-1484-1485-1486-1487-1488-1489-1490-1491-1492-1493-1494-1495-1496-1497-1498-1499-1500-1501-1502-1503-1504-1505-1506-1507-1508-1509-1510-1511-1512-1513-1514-1515-1516-1517-1518-1519-1520-1521-1522-1523-1524-1525-1526-1527-1528-1529-1530-1531-1532-1533-1534-1535-1536-1537-1538-1539-1540-1541-1542-1543-1544-1545-1546-1547-1548-1549-1550-1551-1552-1553-1554-1555-1556-1557-1558-1559-1560-1561-1562-1563-1564-1565-1566-1567-1568-1569-1570-1571-1572-1573-1574-1575-1576-1577-1578-1579-1580-1581-1582-1583-1584-1585-1586-1587-1588-1589-1590-1591-1592-1593-1594-1595-1596-1597-1598-1599-1600-1601-1602-1603-1604-1605-1606-1607-1608-1609-1610-1611-1612-1613-1614-1615-1616-1617-1618-1619-1620-1621-1622-1623-1624-1625-1626-1627-1628-1629-1630-1631-1632-1633-1634-1635-1636-1637-1638-1639-1640-1641-1642-1643-1644-1645-1646-1647-1648-1649-1650-1651-1652-1653-1654-1655-1656-1657-1658-1659-1660-1661-1662-1663-1664-1665-1666-1667-1668-1669-1670-1671-1672-1673-1674-1675-1676-1677-1678-1679-1680-1681-1682-1683-1684-1685-1686-1687-1688-1689-1690-1691-1692-1693-1694-1695-1696-1697-1698-1699-1700-1701-1702-1703-1704-1705-1706-1707-1708-1709-1710-1711-1712-1713-1714-1715-1716-1717-1718-1719-1720-1721-1722-1723-1724-1725-1726-1727-1728-1729-1730-1731-1732-1733-1734-1735-1736-1737-1738-1739-1740-1741-1742-1743-1744-1745-1746-1747-1748-1749-1750-1751-1752-1753-1754-1755-1756-1757-1758-1759-1760-1761-1762-1763-1764-1765-1766-1767-1768-1769-1770-1771-1772-1773-1774-1775-1776-1777-1778-1779-1780-1781-1782-1783-1784-1785-1786-1787-1788-1789-1790-1791-1792-1793-1794-1795-1796-1797-1798-1799-1800-1801-1802-1803-1804-1805-1806-1807-1808-1809-1810-1811-1812-1813-1814-1815-1816-1817-1818-1819-1820-1821-1822-1823-1824-1825-1826-1827-1828-1829-1830-1831-1832-1833-1834-1835-1836-1837-1838-1839-1840-1841-1842-1843-1844-1845-1846-1847-1848-1849-1850-1851-1852-1853-1854-1855-1856-1857-1858-1859-1860-1861-1862-1863-1864-1865-1866-1867-1868-1869-1870-1871-1872-1873-1874-1875-1876-1877-1878-1879-1880-1881-1882-1883-1884-1885-1886-1887-1888-1889-1890-1891-1892-1893-1894-1895-1896-1897-1898-1899-1900-1901-1902-1903-1904-1905-1906-1907-1908-1909-1910-1911-1912-1913-1914-1915-1916-1917-1918-1919-1920-1921-1922-1923-1924-1925-1926-1927-1928-1929-1930-1931-1932-1933-1934-1935-1936-1937-1938-1939-1940-1941-1942-1943-1944-1945-1946-1947-1948-1949-1950-1951-1952-1953-1954-1955-1956-1957-1958-1959-1960-1961-1962-1963-1964-1965-1966-1967-1968-1969-1970-1971-1972-1973-1974-1975-1976-1977-1978-1979-1980-1981-1982-1983-1984-1985-1986-1987-1988-1989-1990-1991-1992-1993-1994-1995-1996-1997-1998-1999-2000-2001-2002-2003-2004-2005-2006-2007-2008-2009-2010-2011-2012-2013-2014-2015-2016-2017-2018-2019-2020-2021-2022-2023-2024-2025-2026-2027-2028-2029-2030-2031-2032-2033-2034-2035-2036-2037-2038-2039-2040-2041-2042-2043-2044-2045-2046-2047-2048-2049-2050-2051-2052-2053-2054-2055-2056-2057-2058-2059-2060-2061-2062-2063-2064-2065-2066-2067-2068-2069-2070-2071-2072-2073-2074-2075-2076-2077-2078-2079-2080-2081-2082-2083-2084-2085-2086-2087-2088-2089-2090-2091-2092-2093-2094-2095-2096-2097-2098-2099-2100-2101-2102-2103-2104-2105-2106-2107-2108-2109-2110-2111-2112-2113-2114-2115-2116-2117-2118-2119-2120-2121-2122-2123-2124-2125-2126-2127-2128-2129-2130-2131-2132-2133-2134-2135-2136-2137-2138-2139-2140-2141-2142-2143-2144-2145-2146-2147-2148-2149-2150-2151-2152-2153-2154-2155-2156-2157-2158-2159-2160-2161-2162-2163-2164-2165-2166-2167-2168-2169-2170-2171-2172-2173-2174-2175-2176-2177-2178-2179-2180-2181-2182-2183-2184-2185-2186-2187-2188-2189-2190-2191-2192-2193-2194-2195-2196-2197-2198-2199-2200-2201-2202-2203-2204-2205-2206-2207-2208-2209-2210-2211-2212-2213-2214-2215-2216-2217-2218-2219-2220-2221-2222-2223-2224-2225-2226-2227-2228-2229-2230-2231-2232-2233-2234-2235-2236-2237-2238-2239-2240-2241-2242-2243-2244-2245-2246-2247-2248-2249-2250-2251-2252-2253-2254-2255-2256-2257-2258-2259-2260-2261-2262-2263-2264-2265-2266-2267-2268-2269-2270-2271-2272-2273-2274-2275-2276-2277-2278-2279-2280-2281-2282-2283-2284-2285-2286-2287-2288-2289-2290-2291-2292-2293-2294-2295-2296-2297-2298-2299-2300-2301-2302-2303-2304-2305-2306-2307-2308-2309-2310-2311-2312-2313-2314-2315-2316-2317-2318-2319-2320-2321-2322-2323-2324-2325-2326-2327-2328-2329-2330-2331-2332-2333-2334-2335-2336-2337-2338-2339-2340-2341-2342-2343-2344-2345-2346-2347-2348-2349-2350-2351-2352-2353-2354-2355-2356-2357-2358-2359-2360-2361-2362-2363-2364-2365-2366-2367-2368-2369-2370-2371-2372-2373-2374-2375-2376-2377-2378-2379-2380-2381-2382-2383-2384-2385-2386-2387-2388-2389-2390-2391-2392-2393-2394-2395-2396-2397-2398-2399-2400-2401-2402-2403-2404-2405-2406-2407-2408-2409-2410-2411-2412-2413-2414-2415-2416-2417-2418-2419-2420-2421-2422-2423-2424-2425-2426-2427-2428-2429-2430-2431-2432-2433-2434-2435-2436-2437-2438-2439-2440-2441-2442-2443-2444-2445-2446-2447-2448-2449-2450-2451-2452-2453-2454-2455-2456-2457-2458-2459-2460-2461-2462-2463-2464-2465-2466-2467-2468-2469-2470-2471-2472-2473-2474-2475-2476-2477-2478-2479-2480-2481-2482-2483-2484-2485-2486-2487-2488-2489-2490-2491-2492-2493-2494-2495-2496-2497-2498-2499-2500-2501-2502-2503-2504-2505-2506-2507-2508-2509-2510-2511-2512-2513-2514-2515-2516-2517-2518-2519-2520-2521-2522-2523-2524-2525-2526-2527-2528-2529-2530-2531-2532-2533-2534-2535-2536-2537-2538-2539-2540-2541-2542-2543-2544-2545-2546-2547-2548-2549-2550-2551-2552-2553-2554-2555-2556-2557-2558-2559-2560-2561-2562-2563-2564-2565-2566-2567-2568-2569-2570-2571-2572-2573-2574-2575-2576-2577-2578-2579-2580-2581-2582-2583-2584-2585-2586-2587-2588-2589-2590-2591-2592-2593-2594-2595-2596-2597-2598-2599-2600-2601-2602-2603-2604-2605-2606-2607-2608-2609-2610-2611-2612-2613-2614-2615-2616-2617-2618-2619-2620-2621-2622-2623-2624-2625-2626-2627-2628-2629-2630-2631-2632-2633-2634-2635-2636-2637-2638-2639-2640-2641-2642-2643-2644-2645-2646-2647-2648-2649-2650-2651-2652-2653-2654-2655-2656-2657-2658-2659-2660-2661-2662-2663-2664-2665-2666-2667-2668-2669-2670-2671-2672-2673-2674-2675-2676-2677-2678-2679-2680-2681-2682-2683-2684-2685-2686-2687-2688-2689-2690-2691-2692-2693-2694-2695-2696-2697-2698-2699-2700-2701-2702-2703-2704-2705-2706-2707-2708-2709-2710-2711-2712-2713-2714-2715-2716-2717-2718-2719-2720-2721-2722-2723-2724-2725-2726-2727-2728-2729-2730-2731-2732-2733-2734-2735-2736-2737-2738-2739-2740-2741-2742-2743-2744-2745-2746-2747-2748-2749-2750-2751-2752-2753-2754-2755-2756-2757-2758-2759-2760-2761-2762-2763-2764-2765-2766-2767-2768-2769-2770-2771-2772-2773-2774-2775-2776-2777-2778-2779-2780-2781-2782-2783-2784-2785-2786-2787-2788-2789-2790-2791-2792-2793-2794-2795-2796-2797-2798-2799-2800-2801-2802-2803-2804-2805-2806-2807-2808-2809-2810-2811-2812-2813-2814-2815-2816-2817-2818-2819-2820-2821-2822-2823-2824-2825-2826-2827-2828-2829-2830-2831-2832-2833-2834-2835-2836-2837-2838-2839-2840-2841-2842-2843-2844-2845-2846-2847-2848-2849-2850-2851-2852-2853-2854-2855-2856-2857-2858-2859-2860-2861-2862-2863-2864-2865-2866-2867-2868-2869-2870-2871-2872-2873-2874-2875-2876-2877-2878-2879-2880-2881-2882-2883-2884-2885-2886-2887-2888-2889-2890-2891-2892-2893-2894-2895-2896-2897-2898-2899-2900-2901-2902-2903-2904-2905-2906-2907-2908-2909-2910-2911-2912-2913-2914-2915-2916-2917-2918-2919-2920-2921-2922-2923-2924-2925-2926-2927-2928-2929-2930-2931-2932-2933-2934-2935-2936-2937-2938-2939-2940-2941-2942-2943-2944-2945-2946-2947-2948-2949-2950-2951-2952-2953-2954-2955-2956-2957-2958-2959-2960-2961-2962-2963-2964-2965-2966-2967-2968-2969-2970-2971-2972-2973-2974-2975-2976-2977-2978-2979-2980-2981-2982-2983-2984-2985-2986-2987-2988-2989-2990-2991-2992-2993-2994-2995-2996-2997-2998-2999-3000-3001-3002-3003-3004-3005-3006-3007-3008-3009-3010-3011-3012-3013-3014-3015-3016-3017-3018-3019-3020-3021-3022-3023-3024-3025-3026-3027-3028-3029-3030-3031-3032-3033-3034-3035-3036-3037-3038-3039-3040-3041-3042-3043-3044-3045-3046-3047-3048-3049-3050-3051-3052-3053-3054-3055-3056-3057-3058-3059-3060-3061-3062-3063-3064-3065-3066-3067-3068-3069-3070-3071-3072-3073-3074-3075-3076-3077-3078-3079-3080-3081-3082-3083-3084-3085-3086-3087-3088-3089-3090-3091-3092-3093-3094-3095-3096-3097-3098-3099-3100-3101-3102-3103-3104-3105-3106-3107-3108-3109-3110-3111-3112-3113-3114-3115-3116-3117-3118-3119-3120-3121-3122-3123-3124-3125-3126-3127-3128-3129-3130-3131-3132-3133-3134-3135-3136-3137-3138-3139-3140-3141-3142-3143-3144-3145-3146-3147-3148-3149-3150-3151-3152-3153-3154-3155-3156-3157-3158-3159-3160-3161-3162-3163-3164-3165-3166-3167-3168-3169-3170-3171-3172-3173-3174-3175-3176-3177-3178-3179-3180-3181-3182-3183-3184-3185-3186-3187-3188-3189-3190-3191-3192-3193-3194-3195-3196-3197-3198-3199-3200-3201-3202-3203-3204-3205-3206-3207-3208-3209-3210-3211-3212-3213-3214-3215-3216-3217-3218-3219-3220-3221-3222-3223-3224-3225-3226-3227-3228-3229-3230-3231-3232-3233-3234-3235-3236-3237-3238-3239-3240-3241-3242-3243-3244-3245-3246-3247-3248-3249-3250-3251-3252-3253-3254-3255-3256-3257-3258-3259-3260-3261-3262-3263-3264-3265-3266-3267-3268-3269-3270-3271-3272-3273-3274-3275-3276-3277-3278-3279-3280-3281-3282-3283-3284-3285-



ROSES

*A complete assortment of new
and old favourites*

Beautifully illustrated colour
catalogue—Roses, Lilies,
Perennials, Ornamentals, etc.

EDDIE'S NURSERIES

4100 S.W. Marine Dr.
VANCOUVER 13, B.C.

**FOR ALL YOUR
BANKING
REQUIREMENTS**

IMPERIAL
the **BANK** *that service built*

Our Aim

**CANADIAN ROSES
FOR CANADIAN GARDENS**

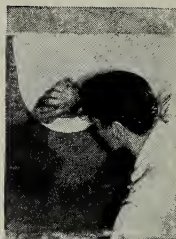
**JOHN CONNOR NURSERIES
LTD**

**Box 200,
WATERDOWN—ONTARIO**

*Growers of Quality Roses
Evergreens, Trees, Shrubs
Hedging, Perennials*

Catalogue mailed on request

Save Redecorating



**YOUR
HOME
CHURCH
PLACE OF
BUSINESS**

Every type of interior wall and ceiling surface restored like new by our patent processes. We also clean on location Upholstered Furniture, Broadloom and Rugs. Phone or write for free estimate

A. TEOLIS LIMITED

4 COLLIER ST. Wa 4-1467

*friendly...
efficient...*

people make
the difference
at



**THE
TORONTO - DOMINION
BANK**

THE BANK THAT LOOKS AHEAD



Mr. B.A.

**salutes the
Canadian
Rose Society**

BROOKDALE - KINGSWAY *Nurseries*

“FOR QUALITY AND SERVICE”

PERENNIALS

HEDGING

VINES

EVERGREENS

TREES

SHRUBS

ROSES

Send for the All New 166 page Garden Guide. Full Colour
Pictures, Helpful Landscaping and Gardening Section 50c

PHONE OR WRITE

BROOKDALE-KINGSWAY NURSERIES

BOWMANVILLE, ONTARIO

BOWMANVILLE MA 3-3345

TORONTO EM 6-2566



We specialize in the best roses for our Canadian climate, over 200 varieties. We give the rating of the A.R.S. when known.



Analysis 23-21-17, plus all minor elements and vitamins B₁ and B₂. 2 lb. \$2.50, ppd.



Fertilizer unit for applying Ra-Pid-Gro. Water passing through dissolves it at the right ratio. \$6.50, ppd.

Our garden catalogue, 96 pages, 16 in natural colours, free on request

W. H. PERRON & CO., LIMITED

515 Labelle Blvd., L'abord a Plouffe (Montreal 9) P.Q.

SAVINGS DEPOSIT FORM 17-58
MADE IN CANADA

**THE CANADIAN
BANK OF COMMERCE**

ACCOUNT NO. DATE

NAME

x	1	=	
x	2	=	
x	5	=	
x	10	=	
x	20	=	
x		=	

Coin.....

Cheques.....
(List on Reverse if necessary)

Bond Coupons.....

Received in Cash \$.....
which is deducted from this Deposit

Deposited by

DO - IT - YOURSELF SAVINGS KIT

Use the pen and fill in the deposit slip every payday. This kit, plus your extra money, used regularly will ensure the building of a healthy Savings Account. It's available at our local branch now.

More than 800 branches across Canada ready to serve you.

**THE CANADIAN
BANK OF COMMERCE**

APHIDS

can be controlled easily with

MALATHION

This year when Aphids (lice) and other insects plague your roses and garden, be sure to use MALATHION, the modern insecticide for your whole garden.

MALATHION on the label is your guarantee of a good insecticide.



CYANAMID OF CANADA LIMITED

Forever . . .
a symbol of Love

. . . The special flower
for special occasions
at Simpson's Flower Shop

Simpson's
Toronto

Florists' Telegraph Delivery



45 Richmond Street West (opposite store)

phone EMPIRE 6-1064

TWINDOW

helps maintain even temperatures
all winter long




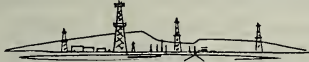

Twindow* helps keep the temperature in this house at a comfortable, even level. It can do the same in your home too! You see Twindow is made up of two pieces of glass separated by an imprisoned layer of dry, non-circulating air.

This makes it an excellent insulator against winter cold. With Twindow, draughts are a thing of the past, even close to the window. No more 'fogged over' windows either, for Twindow virtually eliminates condensation.

Twindow is surprisingly economical to install too. For complete details, contact your local Canadian Pittsburgh branch.

*T. M. Reg'd



All Canadian ---  --- all the way
from  oil fields to
refinery  to you...



CANADIAN OIL COMPANIES, LIMITED



Maytime

Ensure gardening success.
Buy Maytime top quality
products. Always look

ALWAYS NEARBY AT
CHAIN & DEPT. STORES

- BULBS
- SEEDS
- SOILS
- FERTILIZERS

for the Maytime sign and
the little guy on the right.
You'll be glad you did !!

Superior
Bulk Co., Ltd.
LORNE PARK, ONT.

MODERN ROSE NURSERY

Offers you the finest in Canadian grown Roses
Reasonable prices—Guaranteed quality
We also offer a complete Garden Service
Inquiries solicited and should be addressed to

Bert Wiebicke

62 Fitzgibbon Avenue, Scarboro, Ontario
Phone PL 9-6505

THE MAYOR AND COUNCIL
of the

TOWN OF LEASIDE

Welcome The National Show of

THE CANADIAN ROSE SOCIETY

to be held on JUNE 20th at

LEASIDE MEMORIAL COMMUNITY GARDENS,
Millwood Road at Laird Drive, Leaside, Ontario

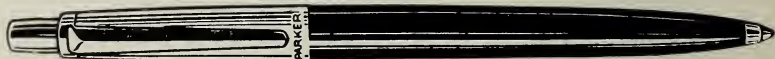
try the new

PARKER

tBall
D.M.G.

jotter

\$1.98



The finest ROSES ever
come from McCONNELLS



ONE OF SEVERAL FIELDS OF McCONNELLS ROSES

Write for your FREE copy of
McCONNELLS 1960 CATALOGUE

FEATURING
THE 1960 ALL-AMERICAN AWARD ROSES
GARDEN PARTY • SARABANDE
FIRE KING

See also the following newest varieties

FLORIBUNDAS

Lavender Princess
Fire Cracker

CLIMBERS

Red Empress
Don Juan
Royal Gold
Golden Showers
Spectacular
Gladiator

HYBRID TEAS

Kordes Perfecta
Careless Love
Pink Peace
Confidence
Pink Duchess

GRANDIFLORAS

Starfire
Merry Widow
El Capitan
Golden Girl

See our complete listing of hundreds of popular varieties.

MEMBERS CANADIAN ASSOCIATION OF NURSEYMEN
MEMBERS AMERICAN ASSOCIATION OF NURSEYMEN
MEMBERS ONTARIO NURSEYMEN'S ASSOCIATION

ESTABLISHED 1912

THE McCONNELL NURSERY CO. LTD

Phone: 30

PORT BURWELL, ONTARIO

EVERGREENS

TREES

SHRUBS

PERENNIALS

VINES

HEDGES

*in many varieties are listed and described in our Illustrated
CATALOGUE. Free on request*

ALSO AN EXTENSIVE LIST INCLUDING
MANY NEW VARIETIES OF

ROSES

Hybrid Teas:

GARDEN PARTY TANYA
PINK DUCHESS

Floribundas:

SARABANDE FIRE KING
LITTLE DARLING

SHERIDAN NURSERIES
LIMITED

Head Office: Box 181, Islington, Ont.

Sales Stations: 2827 Yonge St., Toronto.

Lakeshore Highway No. 2 at Clarkson, Ont.

North Service Road, 1-3 mile West of Highway 27
and Q.E. cloverleaf.

650 Montee de Liesse, St. Laurent, Montreal, P.Q.



